

CITY OF DURBAN

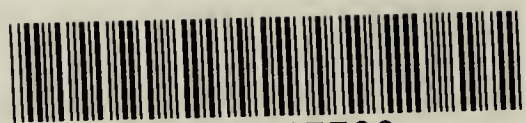


Annual Report

OF THE

CITY MEDICAL OFFICER OF HEALTH

YEAR ENDED 31 DECEMBER, 1976.



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ANNUAL REPORT : 1976

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NOTE: Figures for the previous year (1975) are shown in parenthesis throughout this Report unless otherwise indicated by the context.

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City Health Department,
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January 1979

His Worship the Mayor and
Councillors of the City of Durban.

Mr. Mayor, Ladies and Gentlemen,

I have pleasure in presenting, in terms of Section 13 of the Public Health Act of 1919 as amended the 74th Annual Report on the public health of the City of Durban, with which is included an account of most of the activities of the City Health Department during the calendar year 1976.

Regrettably there has been a delay in issuing the report but this has been impossible to avoid as staff shortages particularly at the higher echelon continued.

The expansion of the City continued in the commercial and industrial spheres whilst it remained the premier holiday resort of the Republic of South Africa, attracting some 550 000 visitors.

The population at the year end was estimated at 861 142.

Public health conditions remained at a satisfactory level despite the floods during March when potentially hazardous conditions occurred.

There were no cases of formidable epidemic diseases. The last case of smallpox occurred in the Republic in 1972 and the global programme of smallpox eradication by vaccination started in 1967 continued with eminently satisfactory results.

Yellow fever posed less of a threat; the cholera situation whilst globally improving caused concern when cases occurred in Rhodesia and Mozambique. Plague appeared to be on the increase worldwide and cases were found in Zaire, Rhodesia and Malagasy. Severe epidemics of viral haemorrhagic fever in Zaire and the Sudan served as a timely reminder that a close watch must be kept on disease trends elsewhere in the world in this age of large numbers of people engaged in quick travelling to remote spots.

In Durban there were three cases of diphtheria, all under five years of age and none had received the benefit of immunization. Encephalitis cases numbered 24,

an increase of 10 over the previous year and there were 56 cases of typhoid fever, all of which were unrelated to the March floods. Viral hepatitis cases numbered 335, an increase over the previous year whilst by contrast, there were only six cases of poliomyelitis. One local case of malaria, the parasite type of which remained unidentified occurred, and although the finding in Durban of *A. gambiae*, the common vector of malaria, for the first time in 30 years was a cause of considerable worry, the two findings were unrelated. However, 12 cases of imported malaria were notified and a programme of intensive post therapy surveillance was instituted and will continue lest the vectors now present, become infected. Eleven cases of tetanus, one more than last year demonstrated the continued prevalence of this disease in the City.

There was an overall reduction in the number of current cases of pulmonary tuberculosis due primarily to a fall in the prevalence amongst African and White primary and pre-school children as well as the elderly. A survey of over 7 000 school children conducted by the Medical Research Council to determine levels of infectivity in the City revealed that the risk of infection in Africans to be, with Pretoria, the lowest in the Republic. Levels for the other communities compare favourably with all other centres. This is indeed a far cry from 1967, when there were 2 423 notifications as compared with the 1 350 this year, accompanied by a halving of the attack rate.

None the less this downward trend must serve as an incentive to renewed efforts to reduce the incidence of this disease very much more. Health education appears to be a vital weapon in the assault on this disease, especially in regard to early detection whilst the provision of convenient outpatient treatment centres is obvious. The holistic approach to the patient and family, covering all facets of health from family planning through nutrition and immunization to socio-welfare advice is showing fruit as a long term policy.

The main cause of death amongst the Whites, Indians and Coloureds remained unchanged, viz. diseases of the heart and circulatory system. In the African community, infective and parasitic diseases along with certain causes of perinatal mortality shared the top place. The number of ill-defined conditions causing death accounted for one of the three main causes of death, not a satisfactory state of affairs from an epidemiological aspect and for forward health planning.

The infant mortality rate based on the number of deaths under the age of one year per thousand live births increased in the White and Coloured communities and the

downward trend amongst the Africans and Indians continued. The African rate of 67,88 was slightly lower than in the previous year but leaves little room for complacency and an improvement can be expected with higher standards of living, better general education and successful family planning promotion, although the important place of health education must never be overlooked. Direct preventive measures such as immunization are already at a very high level and must obviously be maintained, but are unlikely to improve the situation per se.

Family health programmes continued unabated and the high level of staff activity was accentuated by a shortage of community nurses due to the freezing of certain posts by the State Department of Health. Some decrease in attendances necessarily occurred but these were due to less frequent attendance and a decline in the total number of births. None the less the case load remained inordinately high. Temporary venues for clinics were established at New Farm and Phoenix during the year. Free immunization was available at all 38 venues in the City, protection against diphtheria, whooping cough, tetanus, poliomyelitis, measles and smallpox being offered. All schools were visited and diphtheria, tetanus booster inoculations given to Class I pupils and tetanus boosters to Standard II pupils. Vaccinations against smallpox exceeded 25 000 and doses of poliomyelitis vaccine administered numbered some 25 800. In the remainder of the immunization programmes the figures were comparable with previous years and were most satisfactory, example, the figure for measles immunization was 10 713. Typhoid immunization rose dramatically from 2 874 in 1975 to nearly 60 000, the reason being a special campaign launched in the flooded areas of the City.

Home visiting by community nurses to deal with such diverse matters as child behaviour problems, family planning, feeding advice, mental health, clinic defaulting and so on remained at the much the same level, some 41 800 visits being conducted. It is hoped that this vital aspect of family care can be increased in the future. Family planning continued to be undertaken on a large scale, 143 116 attendances being recorded at 20 venues. In addition, field motivation was conducted by 25 Advisers. The teaching centre at Himalaya House was moved at the year end to vastly better and more convenient premises at Montanne House in the City Centre. Here patients of all races received attention whilst the State Health Department conducted regular two-week training sessions for nurses. The mobile clinic service for the factories increased in popularity, being extended to serve 82 factories.

Sterilisation facilities were expanded too at State and Provincial hospitals and this method of permanent contraception is enjoying an increased measure of support, nearly 600 tubal ligations being performed.

Places of care for children from birth to six years, including child minders who care for less than six children were regularly visited and none legally opened without a clearance from this department. Old age homes also received attention.

Twenty six cases of malignancy subsequently proven, were detected under the City Council's scheme for the early detection of uterine cervical cancer. The two community nurses who had been away on study leave to do psychiatric training were successful in their final examinations.

Recruitment of staff for the community liaison section proved difficult indeed and it is hoped that by next year more positive progress in this direction will have been made. None the less a start on a number of projects was undertaken and steady development in this most important field of community involvement is anticipated not only as staff are recruited but as they become accustomed to the philosophy of community as opposed to case work.

A re-organisation of the staff structure and concomitant increase in the number of personnel in the Health Education Section took place during the year and by the year end nearly all (31) posts had been filled. The task of creating desirable attitudes to health, their nurture and maintenance is an essential part of a community health service. It is conceded that a quantitative evaluation of this service is extremely difficult, none the less the enthusiastic reception with which the people greet the lecturers, especially amongst the Indian and African communities coupled with the lively discussions which invariably take place add weight to the more measurable effect seen in the spear heading of immunization campaigns, elimination of head lice programmes and promotion of vegetable garden clubs.

The Health Inspection Section re-structured as visualised in 1975 was completed during the year. The object of this, to improve efficiency and also create better promotion opportunities was soon noticeable and furthermore in contrast to past experience, learner health inspectors remained in the department on qualifying and two additional inspectors were recruited.

Despite the improved situation there remained 13 vacancies at the year end. Unqualified personnel, Health Assistants, alleviated the position to some extent by carrying out simple routine duties and investigating minor complaints. The use of this type of employee will probably become a permanent fixture of the department as the work they perform relieves the Health Inspector of much work which does not call for the standard of qualification he is now required to possess.

Inspections covered a very extensive range of environmental matters as unrelated as foodhandling and offensive trades, mosquito control and slum clearance to dry cleaners and animal keeping. Once again it is pleasing to record the co-operation offered by the vast majority of establishments in the City.

The closure of the Bluff Whaling Station removed a source of annoyance to residents in the southern parts of the City.

Durban continued as a major attraction for holidaymakers with the related entertainments such as horse racing, inter-provincial cricket and rugby matches, religious gatherings and the like all leading to the need for especial vigilance in the preparation and distribution of food. Regrettably the structural inadequacies of several of the beach front restaurants on lease from the City Council remained unchanged, to the discomfort of the public and disappointment of this department.

Set out in Annexure E of this report is a fairly full account of the March floods and the public health measures taken to deal with the situation.

The happy situation of no *Anopheles gambiae* (malaria vector) being found in Durban for some 30 years came to an abrupt end in March when larvae were found in a northern suburb; further instances of breeding were found during the year and the problem was compounded by the finding of another malaria vector, *Anopheles funestus*, which had been absent since 1974.

Surveys and anti mosquito activities were accordingly intensified considerably and it would be fair to remark that these vectors are unlikely to disappear as quickly as they came.

The remaining problems of bed bugs, flies, cockroaches, rodents and miscellaneous other pests received the usual attention.

The milk and milk products supply in the City was of good standard and strict control from the cow to the consumer was exercised. A cause for concern was the increasing incidence of herds affected by brucellosis. Fortunately the safety of the public is safeguarded by pasteurisation. None the less the Veterinary Medical Officer assisted the State Veterinary Services by advising producers registered with this department where indicated.

The co-operation, at all times, of the Natal and East Griqualand Milk Producers Union played a big part in the continued improvement of the standards of dairy buildings and production methods.

The sewerage reticulation programme for the City continued. Some 6 000 premises are still being served by pails, which represents a reduction of 1 000 over last year. However, connections to sewer, replacing septic tanks continued apace.

Settled effluent from the Central and Southern Sewerage Works continued to be discharged through their respective ocean outfalls with conditions on Durban's bathing beaches being so satisfactory that the monitoring of these waters by the Council for Industrial and Scientific Research enabled the Steering Committee to report that the bathing waters were of an extremely high quality, by worldwide standards.

Slum clearance was held to the limit of anticipated alternative accommodation and not to number of habitations unfit for occupation.

Housing for the Coloured community remained critical but a number of projects were planned, put out to contract or under construction at the year's end. Future prospects are not gloomy as in the instance of the Indian community where the demand will be high for a number of years despite projects planned and in hand. The call for housing for the White community was met mainly by the private sector. Housing for the African community was undertaken by the South African Bantu Trust in areas outside the municipal boundary, the actual work being done by the City Council's Engineering Department.

The medical disaster plan continued to be strengthened and improved wherever possible.

Once again staff shortages have plagued the department and the maintenance of a high standard of preventive medicine becomes increasingly difficult. In fact, unless radical steps are taken at State level to devote more attention and monies to preventable illnesses, the future is bleak indeed for local authority health services. The vision of a new Health Act appearing in this report year is the sole source of comfort.

To His Worship the Mayor and City Councillors of Durban, my thanks are due for their interest in public health; while an especial remark is due to the Chairman and members of the Health and Housing Committee for their active support and encouragement.

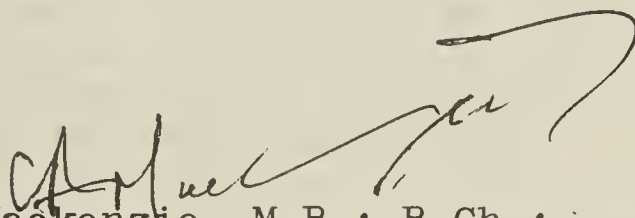
The co-operation afforded my department by members of the other municipal departments is acknowledged with appreciation and assistance of the Municipal Service Commission in regard to staff matters is remarked upon.

The ever willing assistance of the State Health Department is noted with pleasure, whilst the co-operation of other State Departments cannot pass without remark.

Without the sustained interest and ever willing co-operation of Durban's major newspapers and the South African Broadcasting Corporation, this department would be unable to communicate properly with the citizens of Durban on matters of public health concern and importance. My very sincere appreciation is once again recorded.

In conclusion I must pay a special tribute to each and every member of the City Health Department staff for their loyalty, team spirit and consistently high standard of work throughout the year. They have indeed been my inspiration.

Yours faithfully,



C.R. Mackenzie, M.B.; B.Ch.;
D.P.H.; D.T.M. & H. (Rand);
F.R.S.H.; F.I.P.H. (S.A.);
Honorary Senior Lecturer in
Public Health Administration,
University of Natal.

CITY MEDICAL OFFICER OF HEALTH



1. HISTORICAL AND GEOGRAPHICAL

(a) Historical

When viewing the City of Durban it is perhaps difficult to realize that only 150 years have elapsed since the early pioneers braved the swamps, dense bush and wild animals to establish the Port of Natal.

In 1835 the settlement was named D'Urban, after Sir Benjamin D'Urban, the then Governor of the Cape Colony, and 19 years later granted borough status when the population had reached 1 200. Little thought was given to public health in those early days, as although the first Town Council was elected in 1824, 50 years were to pass before the appointment of Durban's first Medical Officer of Health, Dr. Julius Schulz, in 1874.

The Natal Public Health Act was promulgated in 1901, following an epidemic of dengue fever. At the time each colony had its own health laws, and with Union in 1910 these were not regularised. Although the Public Health Bylaws of Durban were initially promulgated in 1911, there was vagueness regarding health matters generally. This weakness was highlighted in the great influenza pandemic of 1918, when thousands of lives were lost. The Public Health Act 36/1919 was subsequently introduced to remedy the defects of the existing health laws.

Arising from a variety of public health problems, five adjoining health boards were incorporated into the borough in 1932. Duties and responsibilities were increased overnight as Durban was enlarged five-fold in area and the population increased from 126 000 to 215 000. Three years later Durban was granted City status.

Development continued in and around Durban, and it was a relief when the sprawling shack settlement of Cato Manor, which had lasted from 1941 to 1964, was finally eliminated. The majority of the inhabitants were rehoused at the kwaMashu Township, which was incorporated into the City in 1957.

Throughout its history the health department has been continually reorientated to ensure the best health protection of an expanding community with diverse needs, and broadened with increased knowledge and experience.

These demands have been more prominent in recent years, and no doubt will continue. Vigilance in safeguarding the health of the City's inhabitants will have to keep pace with this challenge.

(b) Geography

The City is situated on the south easter sea-board of the African continent, at longitude 31° east and latitude 29° south. This fortuitous geographical position has contributed to Durban's status as one of the finest general ports in the southern hemisphere, whilst the ideal year-round climate continues to attract tourists to this premier holiday resort of South Africa. It was estimated by the Durban Publicity Association that 838 000 people visited Durban during the year. Of this figure it is estimated that 120 000 holidaymakers visited Durban during the 1976 Christmas season alone. Details of temperature and other meteorological data are set out in the accompanying table.

(c) General Layout

The foreshore area extends from the harbour entrance in the south to the Umgeni River mouth in the north. Amenities include hotels, restaurants, amusement park, snake park, aquarium, and dolphinarium. Holiday flats, playing fields, parks, golf courses, swimming baths and other recreational facilities are suitably distributed throughout the City.

The principal commercial area extends due west from the foreshore with modern multi-storey buildings, many of which overlook the natural harbour.

The southern portion of the City is characterised by major industries well separated from the adjacent residential areas of the Bluff to the east and Woodlands-Montclair to the west.

(d) Municipal Data

Area: 31 273 hectares

No areas were incorporated or excised during the year.

<u>Valuation:</u>	R1 527 012 920,00	(Land)
	(R1 521 314 510,00)	
	R1 539 193 000,00	(Buildings)
	(R1 447 499 940,00)	

METEOROLOGICAL DATA

1976	24 Hours Shade Temperature (°C)			Relative Humidity			Barometer Readings (Millibars)			Rainfall			Sun- light
	Max.	Min.	Mean	Max.	Min.	Aver.	Max.	Min.	Mean	mm	No. of days on which rain fell	High- est fall (mm)	
Jan.	31, 8	16, 6	23, 7	100	50	81, 0	1023, 4	1004, 8	1014, 3	120, 8	16	43, 7	5, 99
Feb.	22, 8	15, 6	24, 1	100	50	81, 0	1023, 9	1003, 0	1013, 4	119, 7	8	55, 5	6, 18
Mar.	22, 5	16, 0	23, 4	100	45	84, 0	1023, 8	1004, 4	1014, 5	397, 0	14	160, 3	6, 73
April	29, 8	12, 7	21, 3	100	34	80, 0	1026, 2	1005, 0	1017, 2	132, 8	8	27, 6	7, 38
May	27, 3	6, 7	18, 1	100	36	77, 0	1033, 2	1007, 1	1021, 5	36, 4	8	20, 3	6, 79
June	31, 4	6, 9	16, 4	97	18	67, 0	1039, 1	1009, 0	1020, 1	54, 0	2	27, 0	7, 99
July	32, 3	4, 7	16, 4	100	16	67, 1	1034, 1	1007, 1	1021, 2	46, 8	5	28, 5	8, 19
Aug.	27, 2	6, 8	16, 7	100	28	74, 0	1034, 1	1007, 0	1022, 0	76, 8	15	15, 0	6, 65
Sept.	28, 7	9, 3	19, 5	100	44	79, 2	1028, 1	1004, 4	1018, 3	41, 1	8	16, 7	5, 53
Oct.	32, 0	11, 4	19, 7	100	36	78, 4	1032, 2	1002, 8	1016, 5	144, 6	18	67, 1	5, 38
Nov.	33, 3	14, 3	21, 6	100	36	76, 0	1027, 7	993, 5	1012, 1	82, 9	13	46, 0	5, 83
Dec.	22, 5	17, 8	23, 5	100	40	79, 0	1023, 8	987, 8	1010, 0	78, 8	14	22, 3	5, 95
Total for the year :										1331, 7	129	-	6, 55

Rates: (Excluding water rate - figures quoted are cents in the Rand.

	<u>Land</u>	<u>Buildings</u>
(a) <u>Code 1</u> (Residential property - dwellings, maisonettes, etc.)	1,42 cents (1,52 cents)	1,42 cents (1,52 cents)
(b) <u>Code 2</u> (Residential flats, boarding houses, private hotels, etc.)		
(c) <u>Code 3</u> (Other than residential property)	3,192 cents (3,36 cents)	0,266 cents (0,28 cents)

II. VITAL STATISTICS

Population (estimated)

White	215 519	(25,03%)
Coloured	51 636	(6,00%)
African	240 341	(27,90%)
Indian	353 646	(41,07%)
Total	<u>861 142</u>	<u>(100,00%)</u>

The pattern is characteristic of previous years, namely a slight decrease in the proportion of Whites with a corresponding increase in the Coloured and Indian communities.

1976 Births

Race	Male	Female	Total	1975
<u>Legitimate</u>				
White	1 323	1 149	2 472	2 690
Coloured	473	490	963	1 024
African	1 564	1 468	3 032	3 420
Indian	4 327	4 244	8 571	9 339
Total	7 687	7 351	15 038	16 473
<u>Illegitimate</u>				
White	84	94	178	197
Coloured	266	227	493	577
African	2 774	2 772	5 546	5 873
Indian	145	209	354	375
Total	3 269	3 302	6 571	7 022
<u>Total Births</u>				
White	1 407	1 243	2 650	2 887
Coloured	739	717	1 456	1 601
African	4 338	4 240	8 578	9 293
Indian	4 472	4 453	8 925	9 714
Total	10 956	10 653	21 609	23 495

Crude Birth Rates: (Number of births per 1 000 population)

	<u>1976</u>	<u>1975</u>
White	12,30	13,62
Coloured	28,20	32,05
African	35,69	39,81
Indian	25,24	28,58
All races	25,09	28,13

There is a noticeable decline of the crude birth rate amongst all the communities although the rates for the African, Coloured and Indian groups remain high.

Illegitimate Births: (As a percentage of total births)

	<u>1976</u>	<u>1975</u>
White	6,72%	6,81%
Coloured	33,86%	36,04%
African	64,65%	63,20%
Indian	3,97%	3,86%
All races	30,41%	29,89%

The overall percentage of illegitimate births increased very slightly due to increases in the African and Indian communities.

Stillbirths:

Community	Number		Rate per 1 000 live births	
	1976	1975	1976	1975
White	19	22	7,22	7,68
Coloured	21	29	14,63	18,45
African	240	245	28,78	27,08
Indian	142	129	16,17	13,46
Total	422	425	19,92	18,42

The overall rate has increased slightly, mainly due to an increase in the number of stillbirths notified amongst the Indian community.

Deaths:

Race	Total Deaths				Crude death rate per 1000 popul.	
	Male	Female	Total	1975	1976	1975
White	1 080	886	1 966	1 941	9,12	9,16
Coloured	209	142	351	301	6,80	6,02
African	1 208	927	2 135	2 093	8,88	8,97
Indian	1 270	876	2 146	2 192	6,07	6,45
All races	3 767	2 831	6 598	6 527	7,66	7,81

A slight decrease in the overall crude death rate is attributed to the decrease in deaths amongst the White, Indian and African communities.

The three main causes of death in the different communities were as follows, the 1975 figures being given in parenthesis for comparative purposes:-

Cause of Death	Number	Percentage of Total Deaths
<u>White:</u>		
(a) Diseases of the circulatory system	970 (934)	49,34 (48,12)
(b) Neoplasms	381 (386)	19,38 (19,89)
(c) Diseases of the respiratory system (excluding pulmonary tuberculosis)	181 (149)	9,21 (7,68)
<u>Coloured:</u>		
(a) Diseases of the circulatory system	77 (63)	21,94 (20,93)
(b) Accidents, poisoning and violence (external cause)	58 (31)	16,52 (10,30)
(c) Neoplasms	45 (36)	12,82 (11,96)
<u>African:</u>		
(a) Certain causes of perinatal morbidity and mortality	347 (401)	16,25 (19,16)
(b) Infective and parasitic diseases	347 (280)	16,25 (13,38)
(c) Diseases of the respiratory system (excluding pulmonary tuberculosis)	252 (198)	11,80 (9,46)
(d) Diseases of the circulatory system	240 (234)	11,24 (11,18)
<u>Indian:</u>		
(a) Diseases of the circulatory system	753 (764)	35,09 (34,85)
(b) Certain causes of perinatal morbidity and mortality	236 (257)	11,00 (11,72)
(c) Diseases of the respiratory system (excluding pulmonary tuberculosis)	214 (213)	9,97 (9,72)
<u>All Races:</u>		
(a) Diseases of the circulatory system	2 040 (1 995)	30,92 (30,57)
(b) Neoplasms	713 (680)	10,81 (10,42)
(c) Diseases of the respiratory system (excluding pulmonary tuberculosis)	685 (584)	10,38 (8,95)

Ill-defined conditions, due to insufficient detail being provided on the death certificate for African, Coloured and consequently all races account for one of the three main causes of death but are intentionally omitted from the table on the foregoing page.

Infective and parasitic diseases amongst the African community have steadily increased over the past years to their present position of being one of the major causes of death in this community.

Death from motor vehicle accidents totalled 136 (31 White, 24 Coloured, 2 African and 79 Indian) while the total of known suicides was 46 (19 White, three Coloured and 24 Indian).

Infant Mortality: (Deaths under the age of one year excluding stillbirths and rate per 1 000 live births)

Race	No. of Deaths	Rate
White	48 (51)	18,24 (17,80)
Coloured	35 (27)	24,39 (17,18)
African	566 (617)	67,88 (68,19)
Indian	250 (316)	28,46 (32,97)
Total	899 (1 011)	42,43 (43,82)

The above rates compare favourably with those of previous years with continuing evidence of a slight downward trend.

Maternal Deaths: (Deaths from causes related to child-birth and rate per 1 000 live births)

Race	No. of Deaths	Rate
White	- (-)	- (-)
Coloured	- (-)	- (-)
African	3 (1)	0,36 (0,11)
Indian	2 (8)	0,23 (0,83)
All races	5 (9)	0,24 (0,39)

With a further reduction in the number of deaths this year, the situation is satisfactory.

III. COMMUNICABLE DISEASES

INTRODUCTION

No cases of formidable epidemic disease occurred during 1976. Where suspect cases of smallpox were reported, investigations excluded this diagnosis.

GLOBAL EPIDEMIOLOGY

Continuing reference to the World Health Organisation Weekly Epidemiological Record was made to keep informed on disease prevalence in neighbouring states and world trends.

(i) Smallpox

The global programme of smallpox eradication by vaccination continued. Confirmation that smallpox has been eradicated from a country requires at least two years of active surveillance be conducted following onset of the last known case to be certain that no hidden foci remain. In 1973 the first International Commission certified that eradication had been achieved in South America. Subsequent commissions have certified eradication in Indonesia (1974), Western Africa (1976), Afghanistan (1976) and Pakistan (1976). Certification of eradication is predicted for Central and Southern Africa and India in 1977 and Ethiopia, Somalia and Saudi Arabia in 1978.

This progress should be viewed against the situation in 1967 when the intensified eradication programme started. At that time 131 418 cases were reported to the World Health Organisation from 43 countries, 33 of which were considered endemic. Retrospective studies now indicate that the total reported cases represented only about 1% of the actual number of cases that year. By 1970 there were only 17 endemic countries (with six countries reporting imported cases), in 1973 there were four endemic countries (with five countries reporting imported cases) and in 1976 Ethiopia remained the only endemic country (with only one country, Somalia, reporting imported cases).

The total world cases notified to the World Health Organisation in 1975 was 19 278 and in 1976 only Ethiopia (915) and Somalia (38) reported cases, the total being 953.

With this decline in smallpox cases, field surveillance was instituted in 1972 of human infections due to monkeypox virus in Africa. Further study is required to exclude the remote possibility that animal pox virus strains transmitted to man might become established in Africa.

In the Republic of South Africa for the fourth successive year there were no notification, the last case of smallpox having occurred in 1972.

(ii) Yellow Fever

Although several central and West African states were regarded as infected areas, cases of yellow fever were notified only from the United Republic of Cameroon in Africa. There was a notable decrease in cases notified in South America, with Equador, Bolivia, Columbia, Peru and Brazil reporting cases.

(iii) Cholera

The global cholera situation improved during 1976, and since 1975 there have been no further extensions into new territory. The number of countries reporting cholera has decreased and the incidence was maintained at a low level. On the African continent cases were reported from Nigeria, Liberia, Cameroon, Morocco, Mozambique and Rhodesia. The notification of cases of cholera in the latter two neighbouring states was and is cause for concern especially in Rhodesia where the incidence remained consistently high and calls for constant vigilance here.

(iv) Plague

Cases of plague were reported from Zaire, Rhodesia and Malagasy - where incidence remained high. In the Americas an epidemic in Brazil involved several hundred cases and in the United States of America the incidence increased and included one small isolated outbreak.

(v) Influenza

Information correlated at World Health Organisation Collaborating Centres for Reference and Research on Influenza showed a geographically widespread influenza picture during 1976. The strains of virus isolated were antigenically close to A/Victoria/3/75, A/Port Chalmers/1/73, A/Tokyo/1/75, A/England/864/75 and B/Hong Kong/5/72 and 73, with A/Swine/76 emerging in America as the cause of widespread outbreaks of a severe type of influenza. This virus strain is antigenically close to A/Mayo Clinic/103/74, and early in 1976 from an epidemic in a military camp in New Jersey the strain identified was A/New Jersey/8/76. Spread to other countries was limited during 1976.

In the Republic of South Africa the two major isolates were A/Victoria/3/75 and A/Port Chalmers/3/75.

(vi) Foodborne Disease Outbreaks

The importance of good food hygiene measures has been highlighted over the past few years with an increase in the number of foodborne disease outbreaks, especially relating to international travel both by air and sea. The major causes are salmonellosis and staphylococcal infections and a variety of foodshave been implicated.

(vii) Malaria

As part of the worldwide anti-malaria campaign the World Health Organisation continued to issue repeated warnings to travellers entering malaria areas regarding malaria prophylaxis and to alert medical practitioners in non malaria areas or countries to maintain a high index of suspicion in travellers presenting with a pyrexia of unknown origin.

(viii) Viral Haemorrhagic Fever

During September 1976 an epidemic of a severe infection, originally thought to be Marburg Virus Disease occurred in Zaire and Southern Sudan. By November there had been 358 cases, 325 of which were fatal, including some medical and nursing personnel.

The attack rate was eight per 1 000 population and the centre of disease control in Atlanta proved the agent to be a new virus. Measures such as intensive epidemiological study, isolation of cases, serological studies of contacts, attention to sterility of needles, applied in hospitals and in the general community limited the spread before the year end.

Fiftieth Anniversary of the Weekly Epidemiological Record

On 1 April 1926 the first Weekly Epidemiological Record was issued, and now 50 years later, perhaps the two most striking features of that first issue of "Weekly Record" were the reporting of

- (i) cases of smallpox in several countries of Europe and almost 800 cases from 27 states in one week in the United States of America, and
- (ii) 101 cases of typhus from Africa, 305 from Europe and two from America.

In this age the smallpox threat is paling into comparative insignificance. However, the occurrence of new highly lethal infections such as the haemorrhagic virus fevers show the need for constant vigilance against communicable diseases.

A. NOTIFIABLE DISEASESNotifications

During 1976 there was an overall increase in notifications of all notifiable diseases. Although there was a significant decrease in poliomyelitis notifications, there were marked increases in encephalitis, scarlet fever, typhoid fever and viral hepatitis notifications.

The following table reflects, in community groups the number of cases of disease notified, and the overall attack rate:

Disease	W	C	A	I	Total	Attack rate per 1 000 population
Diphtheria	-	-	2	1	3	0,003484
Encephalitis	5	3	8	8	24	0,027870
Insecticide Poisoning	-	-	1	-	1	0,001161
Leprosy	-	1	-	-	1	0,001161
Malaria	1	-	-	-	1	0,001161
Meningococcal Meningitis	3	-	1	4	8	0,009290
Paratyphoid B	1	-	-	-	1	0,001161
Poliomyelitis	-	-	5	1	6	0,006967
Puerperal Sepsis	-	-	1	-	1	0,001161
Scarlet Fever	37	2	-	-	39	0,045289
Tetanus	-	-	9	2	11	0,001277
Typhoid Fever	27	1	21	7	56	0,065030
Viral Hepatitis	67	23	31	214	335	0,389018

Diphtheria

The adjoining table sets out the notifications, deaths and appropriate rates for Durban since 1965 and at five year intervals before then.

Three cases were notified during the year which is the same as in 1975. They were all under five years of age. Of these cases two were Africans and one was an Indian, none of whom had had any immunization against the disease. One African died.

Encephalitis

There were 24 notifications during the year which is an increase of 10 cases compared with 1975. All cases contracted virus encephalitis and the following table sets out the community incidence, whilst deaths are recorded in parenthesis:

	White	Coloured	African	Indian	Total
Virus en- cephalitis	5	3	8 (2)	8	24 (2)

The two deaths recorded were aged three months and seven years respectively.

DIPHTHERIA : NOTIFICATIONS AND DEATHS : 1940 TO 1976																	
(Notification Rate per 1 000 Population : Mortality as a percentage of Total Notifications)																	
Year	WHITE			COLOURED			AFRICAN			INDIAN			ALL RACES				
	Notifications		Deaths	Notifications		Deaths	Notifications		Deaths	Notifications		Deaths	Notifications		Deaths		
	No.	Rate	No.	No.	Rate	No.	%	No.	Rate	No.	%	No.	Rate	No.	%		
1940	194	2,10	3	21	2,60	-	-	16	1,23	2	12,50	23	0,26	254	0,98	6	2,36
1945	255	2,33	6	36	4,01	1	2,78	116	1,61	9	7,76	37	0,37	444	1,53	16	3,60
1950	145	1,10	1	34	2,65	2	5,88	124	0,97	18	14,52	58	0,45	361	0,90	28	7,75
1955	75	0,50	1	34	1,82	2	5,88	102	0,61	16	15,69	69	0,42	280	0,56	34	12,14
1960	9	0,06	1	7	0,28	-	-	56	0,31	6	10,71	22	0,10	94	0,16	11	11,70
1965	1	0,0006	-	2	0,07	-	-	13	0,07	2	15,38	3	0,01	19	0,03	2	10,53
1966	2	0,01	-	1	0,03	1	100,00	16	0,08	3	18,75	21	0,08	40	0,06	10	25,00
1967	1	0,005	-	2	0,07	-	-	18	0,09	5	27,78	8	0,03	29	0,04	7	24,14
1968	1	0,005	-	6	0,19	-	-	9	0,04	1	11,11	14	0,05	30	0,04	4	13,33
1969	-	-	-	1	0,03	-	-	14	0,07	4	28,57	14	0,05	29	0,04	7	24,14
1970	-	-	-	1	0,02	-	-	3	0,01	1	33,33	1	0,003	5	0,006	2	40,00
1971	-	-	-	4	0,09	-	-	4	0,02	-	-	3	0,01	11	0,01	-	-
1972	-	-	-	2	0,04	-	-	3	0,01	-	-	2	0,01	7	0,01	1	14,29
1973	1	0,005	-	-	-	-	-	3	0,01	1	33,33	2	0,01	6	0,01	1	16,66
1974	1	0,005	-	3	0,06	-	-	6	0,03	1	16,67	-	-	10	0,01	1	10,00
1975	1	0,005	-	-	-	-	-	2	0,009	-	-	-	-	3	0,004	-	-
1976	-	-	-	-	-	-	-	2	0,008	1	50,00	1	0,003	3	0,004	1	33,33

Leprosy

One case was notified during the year, a Coloured girl who had been notified in 1975, had been discharged from a leper colony and suffered a relapse.

Malaria

One local case was notified during the year, a White male aged 23 years, from Morningside, whose movements had been confined to Durban and the non-malaria areas of the Drakensberg and Newcastle. The parasite type was not positively identified and the explanation of this case remains unclear.

In addition, 12 cases of malaria infected in other areas were notified. These cases originated from Rhodesia (4), Zambia (1), Malawi (2), South West Africa (2), Angola (1), New Guinea (1), and African East Coast, (1). In seven cases *Plasmodium falciparum* was responsible for the infection, three cases were due to *Plasmodium vivax*, one a mixed *Plasmodium falciparum-vivax* infection and in one the parasite was not positively identified. The post-therapy surveillance programme of notified cases continued and with the increasing numbers of *Anopheles gambiae* found north of the Umgeni River in Durban, the task of ensuring that parasites have been eliminated from notified cases becomes absolutely essential.

Meningococcal Meningitis

The eight cases notified during the year were one less than in 1975.

The following table sets out notifications since 1967 with deaths in parenthesis:-

Year	White	Coloured	African	Indian	Total
1967	6 (2)	4 (1)	20 (3)	4 (-)	34 (6)
1968	5 (1)	3 (2)	15 (3)	4 (1)	27 (7)
1969	4 (1)	4 (1)	17 (1)	10 (1)	35 (4)
1970	4 (2)	- (-)	12 (-)	11 (2)	27 (4)
1971	4 (-)	- (-)	8 (-)	3 (1)	15 (1)
1972	7 (-)	1 (1)	8 (1)	4 (1)	20 (3)
1973	2 (-)	3 (-)	2 (1)	- (-)	7 (1)
1974	3 (-)	- (-)	2 (-)	5 (-)	10 (-)
1975	4 (1)	3 (-)	1 (-)	3 (-)	11 (1)
1976	3 (-)	- (-)	1 (-)	4 (-)	8 (-)

Poliomyelitis

The six notifications received during the year were 14 less than in 1975, and comprised 5 Africans from kwaMashu and 1 Indian from Chatsworth. The ages ranged from 4 months to 11 years. The immunisation state and age distribution is shown hereunder:-

Age	Immunisation State	Total
0 - 11 months	Nil	1
1 year to 1 year 11 months	Nil	3
2 years to 2 years 11 months	1 dose	1
3 years and over	3 doses	1

No deaths were recorded.

The following table sets out notifications in groups since 1967:-

Year	White	Coloured	African	Indian	Total
1967	-	-	-	-	-
1968	-	3	10	-	13
1969	1	2	17	2	22
1970	-	-	2	1	3
1971	-	-	33	2	35
1972	-	2	16	3	21
1973	-	-	2	1	3
1974	-	-	5	-	5
1975	-	1	18	1	20
1976	-	-	5	1	6

Puerperal Sepsis

The single notification was five less than the 1975 figure. This case, an African, gave birth to her baby in a local hospital.

Scarlet Fever

There were 39 notifications during the year, which was an increase of 26 compared with 1975. There were 37 White and 2 Coloured cases.

Only one case was admitted to hospital whilst the remainder were nursed at home.

Tetanus

There was an increase of one notification this year, 11 cases being notified.

Three of the cases were tetanus neonatorum. Three deaths were recorded and are reflected in parenthesis in the following table:-

Ages	White	Coloured	African	Indian	Total
0 - 31 days	-	-	3 (1)	-	3 (1)
1 - 5 months	-	-	-	-	-
6 - 11 months	-	-	-	-	-
1 - 4 years	-	-	-	-	-
5 - 9 years	-	-	1	-	1
10 - 19 years	-	-	1	-	1
20 - 29 years	-	-	-	1	1
30 - 39 years	-	-	2 (1)	-	2 (1)
40 - 50 years	-	-	-	1 (1)	1 (1)
Over 50 years	-	-	2	-	2
Total	-	-	9 (2)	2 (1)	11 (3)

The table below sets out the notifications of tetanus over the last ten years:-

Year	White	Coloured	African	Indian	Total
1967	-	- (-)	24 (12)	3 (2)	27 (14)
1968	-	- (-)	9 (4)	8 (6)	17 (10)
1969	-	1 (1)	17 (5)	10 (5)	28 (11)
1970	-	- (-)	12 (8)	10 (4)	22 (12)
1971	-	- (-)	6 (3)	5 (4)	11 (7)
1972	-	1 (1)	9 (5)	7 (6)	17 (12)
1973	-	- (-)	9 (5)	1 (-)	10 (5)
1974	-	- (-)	6 (1)	3 (-)	9 (1)
1975	-	- (-)	5 (2)	5 (2)	10 (4)
1976	-	- (-)	9 (2)	2 (1)	11 (3)

Typhoid Fever

Fifty six cases of typhoid fever were notified during the year which is an increase of 11 cases over the 1975 figure. This is the highest figure since 1971 when there were 64 notifications. The cases comprised 27 Whites, 1 Coloured, 21 Africans and 7 Indians. The Whites came from all districts of the City while 14 African cases came from kwaMashu. Three of the White cases were from one family.

In all instances, extensive stool and urine tests of contacts and suspects were carried out in an endeavour to trace the source of infection.

The highest incidence of the disease occurred in the month of March when 15 cases were notified but were unrelated to the floods which occurred during that month.

The following table indicates the age and racial distribution of the cases:-

Age	White	Coloured	African	Indian	Total
0 - 4 years	1	-	1	-	2
5 - 9 years	6	-	1	-	7
10 - 14 years	3	1	2	2	8
15 - 19 years	9	-	8	1	18
20 - 24 years	4	-	5	2	11
25 - 30 years	3	-	3	-	6
30 - 39 years	-	-	1	-	1
40 - 49 years	-	-	-	1	1
50 years and over	1	-	-	1	2
Total	27	1	21	7	56

The adjoining table sets out the notifications, deaths and appropriate rates for Durban since 1940. Since 1966 these statistics refer only to cases where *Salmonella typhi* was the causative agent.

Paratyphoid B Fever

A single case of paratyphoid fever was notified, a White child aged seven years.

Viral Hepatitis

Three hundred and thirty five notifications were received of which 67 were White, 23 Coloured, 31 African and 214 Indian. This figure represents an increase of 62 compared with 1975. The main increase was amongst Indians, where notifications increased by 85.

TYPHOID : NOTIFICATIONS AND DEATHS : 1940 TO 1976																				
(Notification Rate per 1 000 Population : Mortality as a percentage of Total Notifications)																				
Year	WHITE				COLOURED				AFRICAN				INDIAN				ALL RACES			
	Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths		Notifications		Deaths	
	No.	Rate	No.	%	No.	Rate	No.	%	No.	Rate	No.	%	No.	Rate	No.	%	No.	Rate	No.	%
1940	52	0,56	5	9,62	4	0,49	-	-	42	0,60	12	28,57	23	0,26	7	30,43	121	0,47	24	19,83
1945	17	0,15	2	11,76	5	0,58	1	20,00	62	0,86	19	30,65	28	0,28	6	21,43	112	0,39	28	25,00
1950	16	0,12	-	-	2	0,16	1	50,00	36	0,28	15	41,67	40	0,31	2	5,00	94	0,24	18	19,15
1955	8	0,05	-	-	3	0,16	-	-	73	0,44	4	5,48	16	0,10	-	-	100	0,20	4	4,00
1960	8	0,05	1	12,50	4	0,16	-	-	71	0,39	3	4,22	7	0,03	-	-	90	0,16	4	4,44
1965	5	0,03	-	-	1	0,03	-	-	23	0,12	-	-	10	0,04	-	-	39	0,06	-	-
1966	-	-	-	-	3	0,10	-	-	37	0,18	3	8,11	12	0,05	-	-	52	0,08	3	5,77
1967	2	0,01	-	-	2	0,07	-	-	23	0,11	1	4,35	10	0,04	-	-	37	0,05	1	2,70
1968	4	0,02	-	-	-	-	-	-	20	0,10	3	15,00	19	0,07	-	-	43	0,06	3	6,98
1969	6	0,03	-	-	-	0,15	-	-	24	0,11	8	33,00	9	0,03	-	-	44	0,06	8	18,18
1970	2	0,01	-	-	5	-	-	-	30	0,15	3	10,00	5	0,02	-	-	37	0,05	3	8,11
1971	16	0,08	1	6,25	3	0,07	1	33,33	31	0,15	5	16,13	14	0,05	-	-	64	0,08	7	10,94
1972	2	0,01	-	-	1	0,02	-	-	39	0,18	4	10,26	6	0,02	-	-	48	0,06	4	8,33
1973	12	0,06	1	8,33	4	0,08	-	-	17	0,07	-	-	10	0,03	-	-	43	0,05	1	2,32
1974	3	0,01	-	-	1	0,02	-	-	15	0,07	1	6,67	5	0,02	-	-	24	0,03	1	4,17
1975	3	0,01	-	-	1	0,02	-	-	17	0,07	-	-	14	0,04	-	-	35	0,04	-	-
1976	27	0,13	-	-	1	0,02	-	-	21	0,09	1	4,76	7	0,02	-	-	56	0,07	1	1,79

One death was recorded, a White male aged 29 years. Two hundred and sixty four cases were hospitalised, almost all being non-White.

B. OTHER INFECTIOUS DISEASES

The only statistics available to indicate the prevalence of non-notifiable diseases are obtained from two sources:-

- (i) admission of cases to hospital for isolation and treatment; and
- (ii) monthly returns from school principals.

Table I : Admissions of cases to hospitals

Disease	White	Coloured	African	Indian	Total
Chickenpox	-	1	26	1	28
Measles	36	19	236	24	315
Mumps	-	-	2	-	2
Whooping Cough	4	-	47	1	52

Table II : School notifications (Whites, Coloured and Indians only)

Month	Chicken-pox	Measles	Mumps	Rubella	Whooping Cough
January	17	110	55	5	4
February	6	153	113	4	4
March	52	137	177	10	9
April	14	140	235	16	4
May	16	120	304	19	9
June	60	272	307	19	35
July	45	195	159	25	6
August	76	300	217	28	6
Sept.	18	544	273	68	10
October	100	300	210	25	13
November	56	308	100	25	-
December	2	60	20	8	-
Total	462	2 639	2 170	252	100

IV. TUBERCULOSISINTRODUCTION

There was a distinct overall reduction in the number of current cases of pulmonary tuberculosis in the City during 1976. This arose mainly from a fall in prevalence in the White and African groups, whereas the Coloured and Indian levels remained unchanged. The same pattern was seen in the new Ex-City cases attending municipal clinics. The attack rate in respect of new notifications, also displayed a pleasing drop except in the Coloured group where a small increase occurred. The reduced incidence occurred chiefly in the primary and pre-school children and in the elderly. Outpatient treatment continued to be emphasized but it was still necessary for some 42% of patients notified by municipal clinics to be admitted to hospital. On the other hand the vast majority of notifications from Provincial or Private hospitals, were in respect of cases admitted directly to a tuberculosis hospital. Increasingly good co-operation has been obtained from employers in respect of regular outpatient therapy.

Health education by formal sessions and by opportune meetings of other staff and the public, still receives high priority as this is, at present, probably the most efficient source of detection. It is certainly the most likely method of bringing to light the hidden infective case, who without some encouragement, will not attend for examination. The case detection from Influx Control and Pre-Employment X-Rays was extremely low, being 26 cases from 41 452 X-Rays. Miniature mass radiography of commerce and industry employees has been discontinued, but it is hoped to make such facilities available selectively at the large hostels, where a relatively high incidence of pulmonary tuberculosis occurs.

A survey of 7 024 school children was carried out during the year at the request of the Tuberculosis Research Unit of the Medical Research Council to determine levels of infectivity in the City. Initial results have shown the risk of infection in Africans to be 0,88% which with Pretoria is the lowest encountered in the Republic, whilst the levels for other race groups compare favourably with all other centres. A further follow-up study is planned for 1977.

The following table sets out known current cases of pulmonary tuberculosis in Durban as at the end of 1976:-

STATISTICAL SUMMARY : CITY AND EX-CITY CASES TREATED IN 1976

Details	WHITE		COLOURED		AFRICAN				INDIAN				TOTAL		Grand Total
	City		City		City		Ex-City		City		Ex-City		City	Ex-City	
	M	F	M	F	M	F	M	F	M	F					
New Cases	259	63	93	24	9 928	3 931	4 383	4 108	769	122	100	34	15 189	8 625	23 814
Total Attendance	314	68	156	55	26 959	9 609	9 678	9 541	1 575	291	199	66	39 027	19 484	58 511

Race	City Cases	Ex-City Cases	Total
White	446 (487)	99 (111)	545 (598)
Coloured	451 (453)	99 (102)	550 (555)
African	6 174 (6 883)	3 261 (3 618)	9 435 (10 501)
Indian	1 256 (1 252)	161 (149)	1 417 (1 401)
Total	8 327 (9 075)	3 620 (3 980)	11 947 (13 055)

The reduction in this respect is due to both declassification of healed pulmonary tuberculosis cases and to a real reduction in incidence.

STATISTICS OF CITY CASES

(A) Pulmonary Tuberculosis

(i) Notifications

Annual notifications of new cases with appropriate attack rates per 1 000 population are set out below:-

Year	White		Coloured		African		Indian		Total	
1967	133	0,76	149	4,85	1 566	7,68	575	2,18	2 423	3,55
1968	79	0,42	103	3,27	1 262	6,11	495	1,83	1 939	2,78
1969	81	0,42	100	3,09	1 234	5,89	469	1,69	1 884	2,66
1970	95	0,49	124	2,91	1 099	5,48	459	1,58	1 777	2,45
1971	87	0,44	99	2,24	1 067	5,10	445	1,46	1 698	2,25
1972	75	0,38	120	2,64	941	4,38	375	1,20	1 511	1,96
1973	58	0,29	103	2,24	891	4,08	354	1,11	1 406	1,80
1974	62	0,30	101	2,09	936	4,12	321	0,97	1 420	1,75
1975	85	0,40	82	1,64	1 002	4,29	325	0,96	1 494	1,79
1976	37	0,17	93	1,80	914	3,80	306	0,87	1 350	1,57

The downward trend in the overall attack rate particularly in African and Indian populations is noticeable and pleasing despite harder economic times.

The age and sex distribution of these cases was as follows:-

Age in Years	White		Coloured		African		Indian		Sub Total		Total
	M	F	M	F	M	F	M	F	M	F	
0 - 4	2	1	8	6	49	46	11	13	70	66	136
5 - 14	-	-	2	5	34	32	11	16	47	53	100
15 - 24	2	4	3	6	84	45	37	23	126	78	204
25 - 44	5	3	26	13	290	77	80	41	401	134	535
45 - 64	12	2	14	4	178	50	39	22	243	78	321
65 and over	2	4	2	4	26	3	8	5	38	16	54
Total	37		93		914		306		925	425	1 350

Source of Notifications (1975 figures in parenthesis)

Tuberculosis clinics	=	870	(1 013)
Hospitals	=	464	(456)
Other	=	16	(25)
		<u>1 350</u>	<u>(1 494)</u>

(ii) Deaths (following page)

(iii) Other Epidemiological Information

Over and above the preceding statistical tables certain other information has been extracted from the computerised tables.

(a) Form of Pulmonary Tuberculosis (New and Re-notifications)

(see table)

(b) Hospital and/or Outpatient Treatment (New and Re-notifications)

Of all City and Ex-City cases notified, including new cases and re-notifications, 1 305 received outpatient treatment
1 220 were hospitalised

Total	<u>2 525</u>
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(c) Sputum State (New and Re-notifications)

Where the direct sputum result was available at the time of notification the following were either sputum positive or negative:-

	Sputum Positive	Sputum Negative
Hospital cases	640	239
Outpatient cases	463	515

(ii) Deaths

Deaths for 1976 connected for inward and outward transfers, are set out below with the death rate per 1 000 population:-

Year	White		Coloured		African		Indian		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
1967	9	0,05	7	0,23	82	0,40	24	0,09	122	0,18
1968	7	0,04	10	0,32	73	0,35	16	0,06	106	0,15
1969	6	0,03	3	0,09	50	0,24	21	0,08	80	0,11
1970	7	0,04	5	0,11	65	0,32	19	0,06	96	0,13
1971	3	0,01	8	0,18	54	0,25	14	0,04	79	0,10
1972	4	0,02	1	0,02	57	0,27	18	0,06	80	0,10
1973	2	0,01	6	0,13	49	0,22	14	0,04	71	0,09
1974	1	0,01	6	0,12	41	0,18	7	0,02	55	0,07
1975	3	0,01	4	0,08	68	0,29	15	0,04	90	0,11
1976	4	0,02	6	0,12	65	0,18	13	0,05	88	0,10

(d) Method of Referral (New notifications only)

Excluding hospital referrals the following is indicative of the method of referral of new cases:

Attended on their own	768
Referred by departmental staff	121
Referred by medical practitioner	158
Referred by employer	64

(e) Sources of Detection (New notifications only)

This refers to whether a case is detected as a result of contact tracing or investigation of a suspect or whether the pulmonary tuberculosis had been diagnosed prior to attendance at departmental clinics.

The most notable sources of detection were:-

Attended as suspects	1 164
Known pulmonary tuberculosis cases	59
Home contact referrals	118
Work contact referrals	3

(f) Occupation of Cases at time of Notification
(New Notifications only)

Where a definite occupation was listed the following were the most frequent:-

Labourers	294
Unemployed	248
Clerical/Scholar	108
Housewife	97
Domestic Servant	60
Foodhandler	14

(B) Non-Pulmonary Tuberculosis(i) Notifications

Notifications of non-pulmonary tuberculosis since

1967 are set out below:-

Year	White	Coloured	African	Indian	Total
1967	-	-	29	31	60
1968	1	-	45	37	83
1969	-	1	35	41	77
1970	1	1	31	23	56
1971	2	5	41	27	75
1972	2	2	42	27	73
1973	2	3	50	25	80
1974	1	3	34	15	53
1975	-	-	23	47	70
1976	-	3	48	39	90

The age group analysis of the 90 cases for 1976 is as follows:-

Ages	White	Coloured	African	Indian	Total
0 - 4 years	-	-	10	-	10
5 - 14 years	-	1	6	2	9
15 - 24 years	-	2	6	5	13
25 - 44 years	-	-	10	24	34
45 - 64 years	-	-	14	7	21
65 +	-	-	2	1	3
Total	-	3	48	39	90

Comment

A further 20 cases were notified as suffering from concurrent pulmonary disease. Of this combined total of 110 cases the more common conditions were:-

Osteitis and Arthritis	25
Lymphadenitis	24
Meningitis	20
Peritonitis	12
Pericarditis	7
Other	22
	<hr/>
	110
	<hr/>

(ii) Deaths

Deaths from non-pulmonary tuberculosis corrected for inward and outward transfers are reflected below:-

Year	White	Coloured	African	Indian	Total
1967	1	1	29	9	40
1968	-	2	17	5	24
1969	-	2	12	7	21
1970	-	-	4	2	6
1971	-	2	5	6	13
1972	1	-	3	1	5
1973	-	-	7	3	10
1974	-	-	4	2	6
1975	-	-	5	2	7

Hospital Admissions

A total of 733 City cases of pulmonary tuberculosis was admitted to various hospitals and comprised of 19 Whites, 46 Coloureds, 490 Africans and 178 Indians. Discharges totalled 515 made up of 18 Whites, 29 Coloureds, 334 Africans and 134 Indians. Thirty-four patients absconded or left hospital against medical advice and every effort was made to follow them up immediately and try to persuade them to return or to attend for intensive outpatient therapy.

King George V Hospital

This is the only tuberculosis hospital in Durban and is State maintained. Because most of the admissions of City cases are to this hospital the following information is included with the kind permission of the Medical Superintendent. Obviously not all the admissions, discharges and deaths were Durban cases.

King George V Hospital	White	Coloured	African	Indian	Total
Beds	146	46	1 395	127	1 714
Admissions	119	156	3 794	988	5 057
Discharges	117	135	3 805	963	5 020
Deaths	15	11	491	39	556

OUTPATIENT SERVICES

This department operates all pulmonary tuberculosis clinics in the City. In addition to the central Durban Chest Clinic, a service is offered in the township areas of Chatsworth, Merebank, Lamontville and kwaMashu.

Clinic Statistics

The following statistics reflect work performed at this department's clinics during 1976 and applies to City and ex-City cases:-

Details	Durban Chest Clinic	kwa Mashu	Mere-bank	Bay-view	Arena Park	Lamont-ville	Auster-ville	Total
Sessions	253	253	51	52	97	52	47	805
Attendances	105 942	33 980	4 584	8 048	13 191	7 728	2 985	176 458
B.C.G.	6 638	2 472	651	1 200	1 765	537	176	13 439
X-Rays	73 839	6 916	589	1 255	1 702	1 548	763	86 612
Suspects seen	8 589	3 588	1 356	2 119	3 837	1 048	338	20 875
Contacts seen	3 117	1 372	135	336	332	464	311	6 067
Strept. Injections	16 837	-	225	181	605	1 122	361	-
Tuberculin Tests	9 485	2 488	1 227	2 015	3 332	999	420	19 966

At the Durban Chest Clinic 14 324 influx control and 27 128 pre-employment X-Rays were undertaken and are included above.

During the year the following numbers of suspects and contacts were admitted to these clinics for the first time:-

Durban Chest Clinic	kwa Mashu	Mere-bank	Chatsworth		Lamont-ville	Auster-ville	Total
			Town-ship Centre	Bay-view			
11 706	4 960	1 491	4 169	2 455	1 512	649	26 942

Investigations of these persons yielded the following cases of pulmonary tuberculosis:-

Details	Durban Chest Clinic	kwa Mashu	Mere- bank	Chatsworth		Lamont- ville	Auster- ville	Total
				Arena Park	Bay- view			
Pulmonary tubercu- losis	1 022	407	17	53	47	102	22	1 670
Pulmon- ary tubercu- losis cases of a % of clinic admis- sions	8,73%	8,21%	1,14%	1,27%	1,91%	6,75%	3,39%	6,2%

Tuberculin testing is performed routinely on children under 15 years and precedes B.C.G. vaccination at all departmental clinics. The following table analyses the tuberculin tests performed at the various clinics during the year:-

Tuberculin Tests	Durban Chest Clinic	kwa Mashu	Mere- bank	Chatsworth		Lamont- ville	Auster- ville
				Town- ship Centre	Bay- view		
Tests done	9 485	2 488	1 227	3 332	2 015	999	520
% Read	83,4%	84,6%	87,6%	88%	86,9%	83,6%	71,9%
% of tests read which were posi- tive	17,9%	81,6%	42,9%	41,5%	34,4%	49,2%	40,7%

BCG ADMINISTRATION AND SCHOOLS PROGRAMME

The following numbers of BCG immunizations were administered during the year:-

(i)	Newborns at all hospitals	26 000
(ii)	Municipal clinics	13 581
(iii)	Schools	17 252
Total		<u>56 833</u>

Schools Programme

The routine B.C.G. programme was repeated during the year in all schools except those attended by Whites. The table below gives an analysis of the tests carried out and numbers given B.C.G. It should be noted that absentees on the initial test days were routinely given B.C.G. if present on the second visit. No cases of active pulmonary tuberculosis were detected.

Classes	Tested	Heaf 0	Heaf 1	B.C.G. Given	Heaf 2/3	Heaf 4
<u>JUNIORS</u>						
Coloured	161	45	100	162	-	-
African	1 285	648	359	1 100	65	9
Indian	7 195	3 541	3 089	7 008	50	3
<u>SENIORS</u>						
Coloured	524	80	368	502	27	2
Indian	4 852	1 079	3 309	4 780	167	13
Total	14 017	5 393	7 225	13 552	309	27

In addition the Open Air School in Manning Road was visited and 104 White children tested and 112 B.C.G. vaccinations administered.

The absence of senior African schools from the list is due to administration of B.C.G. to both final and pre-final standards in 1975 to avoid the possibility of their being overlooked during the contemplated transition to kwaZulu in 1977.

Medical Research Council Project

An additional task this year was a tuberculin survey of school children of all races under the schedules prescribed by the Tuberculosis Research Unit in Pretoria. This was to be the first stage in determining the infection risk rate in the City area, and it is to be complemented by a similar survey in 1977.

The following table sets out the results for this year:-

Results of Mantoux 1 TBU Test Survey

	Tested	Less than 10 mm and given B.C.G.	Over 14 mm sent for X-Ray
<u>JUNIORS</u>			
White	2 217	2 172 (B.C.G. not given)	45
Coloured	1 135	1 050	57
African	1 836	1 429	371
Indian	1 219	1 221	34
<u>SENIORS</u>			
White	617	600 (B.C.G. not given)	17
Total	7 024	3 700	524

The conditions for the survey did not require differentiation of White children into intermediate grades of Mantoux reaction and B.C.G. was not administered as routine. Only primary school entries were examined in non-White schools whereas the opportunity was taken in the White schools to check all classes. No cases of active pulmonary tuberculosis were detected. Next year's survey results are awaited with great interest.

FIELD CONTROL PROGRAMMES

A staff of three White Community Health Nurses, one White Health Inspector, and 15 African and eight Indian Health Assistants carried out 47 408 home and industrial visits during the year (52 573 in 1975) in follow up or tracing patients or contacts of tuberculosis and venereal diseases. They continued to practice the total community medicine concept of all facets of health including family planning, nutrition, immunization and socio-welfare advice in their contact with cases and their families.

SUPPLEMENTARY FEEDING OF INDIGENT TUBERCULOSIS CASES

A sum of R9 000,00 was again available during the year for the purchase of foodstuffs to supplement the diet of indigent pulmonary tuberculosis patients.

During the year, 1 650 rations were distributed compared with 3 728 in 1975. Although the cost of foodstuffs has increased this has been offset by a reduction in patients requiring rations.

The following table reflects the number of patients given rations, as well as the total amount of rations distributed:-

Age Group Years	White		Coloured		African		Indian		Total	
	Patients	Rations	Patients	Rations	Patients	Rations	Patients	Rations	Patients	Rations
0 - 4 years	-	-	3	36	1	19	4	54	8	109
5 - 8 years	-	-	1	14	2	53	2	12	5	79
9 - 12 years	-	-	-	-	2	2	1	10	3	12
13 years and over	-	-	3	19	90	1 087	22	344	115	1 450
Total	-	-	7	69	95	1 161	29	420	131	1 650

DOMICILIARY ASSISTANCE OF PULMONARY TUBERCULOSIS PATIENTS

The two main charitable organisations played a large part in supporting needy patients and families.

Natal Anti-Tuberculosis Association made available R15 150,00 in cash and kind, chiefly to Africans, whereas the Friends of the Sick Association allocated funds of R16 225,00 to Indian patients.

The field staff of the department continue to assist all patients with financial problems, including sick pay, unemployment benefits and hire purchase arrangements.

V. VENEREAL DISEASES

There are three Special Clinics in Durban for the diagnosis and treatment of venereal diseases. There are two major clinics at Addington Hospital for Whites and Coloureds and King Edward VIII Hospital for Indians and Africans, and a smaller once weekly clinic in the kwaMashu Township for Africans. The Addington Hospital clinic is conducted by that hospital on behalf of the Durban City Council while the City Health Department conducts the other clinics.

Quarterly returns submitted to the Department of Health reflect new cases and total attendances for each disease category amongst other statistics. This is the only source of statistical information and although it is impossible to know how many cases are treated elsewhere, nevertheless reflects a base for comparison from year to year.

NEW CASES

The total number of new cases (City and Ex-City) who attended clinics during 1976 was 23 814 compared with 23 422 during 1975. Of these 15 189 were City cases giving an attack rate of 1,76 per 100 population. This figure represents a slight decrease over the previous year.

The following table sets out new City cases for 1966, 1975 and 1976 and corresponding attack rates:-

NEW CITY CASES						ATTACK RATE PER 100 POPULATION				
Year	White	Col.	Afr.	Ind.	Total	White	Col.	Afr.	Ind.	Total
1966	727	334	11 871	764	13 696	0,4	1,12	5,91	0,30	2,05
1975	336	127	14 094	887	15 444	0,16	0,25	6,04	0,26	1,85
1976	322	117	13 859	891	15 189	0,15	0,23	5,77	0,25	1,76

TOTAL ATTENDANCES

The total attendances of City and ex-City cases at all clinics was 58 511 as against 56 315 in 1975. The adjoining tables reflect new cases and total attendances according to disease category as well as a summary for City and ex-City cases for 1976:-

STATISTICAL SUMMARY : CITY AND EX-CITY CASES TREATED
IN 1976

Details	WHITE		COLOURED		AFRICAN				INDIAN				TOTAL		Grand Total		
	City		City		City		Ex-City		City		Ex-City		City			Ex-City	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F		M	F
New Cases	259	63	93	24	9 928	3 931	4 383	4 108	769	122	100	34	15 189	8 625	23 814		
Total Attendance	314	68	156	55	26 959	9 609	9 678	9 541	1 575	291	199	66	39 027	19 484	58 511		

CLINIC SERVICESAddington Hospital

During 1975 this service was incorporated into the outpatient/casualty departments. Unfortunately the fuller statistics previously available have not been forthcoming. The following statistics, however, have been supplied:-

Race	NEW CASES			TOTAL ATTENDANCES		
	Male	Female	Total	Male	Female	Total
White	259	63	322	314	68	382
Coloured	93	24	117	156	55	211
Total	352	87	439	470	123	593

Congella and kwaMashu

The Congella Clinic is situated at King Edward VIII Hospital and operates Monday to Friday. The kwaMashu Clinic operates from the department's family health clinic at Goodwins Cottage for three hours on a Wednesday morning. Both clinics operated satisfactorily with staff at full strength.

New cases and total attendances at these two clinics during the year were:-

Race	NEW CASES			TOTAL ATTENDANCES		
	Male	Female	Total	Male	Female	Total
African	14 311	8 039	22 350	36 637	19 150	55 787
Indian	869	156	1 025	1 774	357	2 131
Total	15 180	8 195	23 375	38 411	19 507	57 918

There was a slight increase in number of new attendances to 23 375 from 22 964 in 1975. The percentage of venereal disease cases discovered among these new attendances was 84% for males and 47% for females.

VENEREAL DISEASES IN DURBAN DURING 1976

(N.B. This table refers to number of diseases diagnosed NOT number of cases)

Details	NEW CASES						TOTAL ATTENDANCES					
	African		Indian		Total		African		Indian		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
1. Sero-negative primary syphilis	-	-	-	-	-	-	-	-	-	-	-	-
2. Sero-positive primary syphilis	1 016	239	15	10	1 031	249	2 583	601	33	6	2 616	607
3. Secondary syphilis	103	520	2	2	105	625	252	1 152	4	10	256	1 162
4. Tertiary syphilis (clinically recognized)	-	-	1	-	1	-	-	-	1	-	1	-
5. Latent syphilis (diagnosed on result of serological test alone)	264	902	20	9	284	911	1 106	2 999	90	32	1 196	3 031
6. Neuro-syphilis	-	2	-	-	-	2	-	2	-	-	-	2
7. Congenital syphilis (under 1 year)	79	94	-	-	79	94	248	257	-	-	248	257
8. Congenital syphilis (over 1 year)	5	9	-	-	5	9	12	15	-	-	12	15
Total syphilis	1 467	1 766	38	21	1 505	1 787	4 201	5 026	128	48	4 329	5 074
9. Gonorrhoea	5 080	1 159	256	47	5 336	1 206	13 213	2 732	555	109	13 768	2 841
10 G.C. vulvo-vaginitis	-	2	-	-	-	2	-	4	-	-	-	4
11. G.C. ophthalmia	7	9	-	-	7	9	14	15	-	-	14	15
Total G.C. Infections	5 087	1 170	256	47	5 343	1 217	13 227	2 751	555	109	13 782	2 860
12. Ulcus molle	3 921	820	148	27	4 069	847	10 322	1 994	292	53	10 614	2 047
13. Lymphogranuloma venereum	45	8	-	-	45	8	94	14	1	-	95	14
14. Granuloma inguinale	29	19	-	-	29	19	67	32	-	-	67	32
15. Venereal warts	517	173	20	3	537	176	1 418	488	58	10	1 476	498
16. Non-specific urethritis	1 757	5	70	1	1 827	6	3 978	5	137	-	4 115	5
17. Non-venereal	1 713	4 180	352	67	2 065	4 247	3 872	9 038	634	153	4 506	9 191
Total	7 982	5 205	590	98	8 572	5 303	19 751	11 571	1 122	216	20 873	11 787
Grand Total	14 536	8 141	884	166	15 420	8 307	37 179	19 348	1 805	373	38 984	19 721
Total of Races	22 677		1 050		23 727		56 527		2 178		58 705	

Treatment

Benzathine Penicillin for gonorrhoea and syphilis, and Streptomycin for chancroid were the main drugs of choice. Doses given during the year were:-

Benzathine G. Penicillin	2,4 mega units	20 082 doses
	1,2 mega units	8 132 doses
Streptomycin	1 gram	16 787 doses

Other drugs available for use are Sulphadimethoxine, Erythromycin, Oxytetracycline, Flagyl, Co. Trinoxazole and Spectinomycin.

No significant side reactions occurred to treatment.

Antenatal Cases

Most patients were referred from the hospital but some attended voluntarily. The following figures are relevant:-

Clinic	Patients	Positive V.D.R.L.	% Positive
Congella	1 454	400	27,5
kwaMashu	391	145	37,1
Total	1 845	545	29,5

A small number of patients with initial positive serology were found negative on repeat V.D.R.L. tests at the clinic.

Contacts of City Cases

Tracing contacts is routinely attempted. There were 1 436 patients (6,14%) providing information about their contacts. Contact advice forms were given to them and 344 contacts attended of their own accord and a further 140 after being referred by field staff. Thus 484 or 33,7% of known contacts attended clinic.

Defaulters

Defaulters are always followed up and 7 818 visits were made to refer them to clinics. The extent of the problem and success of follow up are indicated hereunder:-

Defaulters requiring follow up	6 653
Defaulters followed up	5 548
Number of above group who re-attended	3 132 (56,45%)

LABORATORY EXAMINATIONS(a) Departmental Side-room - Microscopy

Urethral and vaginal smears and male spun urine deposits are examined by the Gram stain method for Gonococci.

Smears	.....	21 700 examined with 7 720 positive for gonococci (35,57%)
Urine deposits	.....	2 676 examined with 893 positive for gonococci (33,37%)

(b) State Laboratory - Serology

The Currie Road Laboratory performs the serological tests for syphilis.

During the year 31 891 V.D.R.L. tests were done of which 8 752 (27,44%) were positive.

VI. FAMILY HEALTH

A. MATERNAL HEALTH - FAMILY PLANNING

(i) Family Planning Motivation

Family planning motivation has been conducted throughout the City in an attempt to increase awareness amongst the members of the public both of the availability of family planning clinic services and of the benefits to be derived from the spacing of pregnancies.

Motivation Training

A total of 25 advisers were employed to meet the needs of the expanding service. Training of this staff is of utmost importance. The Department of Health conducted courses covering the medical and sociological aspects of population education, as well as the technique of interviewing, counselling and the art of public speaking. Two two-week courses were conducted in Durban, and a third was held at the newly established Family Planning Training Centre in Pretoria. The course was subsequently increased to three weeks.

In-service training was conducted to re-enforce and add to the knowledge gained from the initial training, and frequent workshops were held, where feed-back from the different communities was discussed.

Field Motivation

Due to the intimate nature of the subject, it is considered that the greatest success in this field, lies in making use of the individual interview. Priority has therefore been given to home visiting where the individual needs of each family can be ascertained, so as to convey to the mother or father, the most appropriate ways in which family planning can be of assistance.

Intensive motivation was conducted throughout the Municipal area, but particular attention was given to the lower socio-economic families, the unemployed and those with social problems. The service was carried out mainly amongst the Africans in kwaMashu, the Coloureds in Austerville and the Indians in Chatsworth.

A total of 59 282 families were visited, of which 20 872 were African, 7 610 Coloured, and 30 800 Indian. Revisits were made to 1 550 families either by request or because further motivation was needed for either health or social reasons. With the inception of the service, a striking increase in the number of women attending the Department's clinics has been apparent.

Clinic and Hospital Motivation

This aspect of the service has been very successful. One adviser was seconded on a full-time basis to the R.K. Khan Hospital and another to the kwaMashu Polyclinic.

Motivation is achieved by group talks and individual counselling and is given at ante- and post-natal clinics, different out-patient departments, in gynaecological wards and especially in the maternity wards.

A total of 1 055 talks was presented to 40 114 patients and 4 904 were counselled individually.

Places of Employment

Motivation in factories and to domestic workers in hotels has expanded somewhat and has owed a great deal of its success to the fact that clinic services have been made available at the place of employment, by the Department's mobile family planning clinic service.

The most convenient time for motivation is in the lunch break. Although this is usually short, maximum advantage is made and 138 talks and film shows were presented to audiences totalling 9 542 persons.

Community Groups

These were organised with the assistance of different church groups and social clubs. A total of 22 talks was given to 1 219 members of the community.

Sterilisation Service

Sterilisation, as a permanent method of contraception, has become increasingly popular and the Indian community in particular has continued to show great interest in this method.

The free hospitalisation services started at King George V Hospital in November 1975 were expanded in June. The number of operations was increased from 12 to 20 per week in an attempt to meet the ever increasing demand. One adviser works full-time at a central clinic, controlling the bookings for this hospital. The adviser is responsible for giving both husband and wife a full explanation of the legal aspects and consequences of the operation, and for ensuring that each patient is adequately prepared before hospitalisation.

A close liaison is kept with field staff in order that any home visits or revisits, which may be necessary can be made. There was a total of 870 requests for sterilisation to be performed at King George V Hospital (this excludes the Provincial Hospitals)

and of these 597 women were sterilised. By the year end the total number awaiting operation was 323.

From March, facilities for free sterilisation were made available at any State or Provincial Hospital in Natal, provided request was made through a family planning clinic.

Teaching Media

The advisers use the flip-charts supplied by the Department of Health in their explanation of the physiology and anatomy of the human reproductive system. In a simple way these show how conception can be prevented by making use of one of the modern methods of contraception.

In conjunction with talks on family planning, films and transparencies are also used. Some excellent and self-explanatory films are available from the Department of Health's Regional Office film library and from the Family Planning Association. Films in English, Afrikaans, Zulu and Xhosa are obtainable.

Liaison Officer

The duties of the Liaison Officer include the supervision of field staff, allocation of their duties, programme planning, implementation of policy and analysis of statistical data. In addition, sensitivity to the changing needs of the different communities is necessary to ensure effective planning and organisation.

Liaison with colleagues in the Department of Health, Provincial Health Services, and Family Planning Association, prevents unnecessary duplication of services, and gives the service cohesion. In addition, liaison with members of commerce and industry, public and voluntary organisation is essential as it provides the very necessary outlet for future expansion of services.

(ii) Family Planning Clinic Services

Family planning clinics were commenced at two new venues for Indians, namely at Phoenix and New Farm, bringing the total number of venues for all race groups to 20.

The central clinic at Himalaya House was moved to Montanne House in the City centre at the end of December 1976 and will be able to cater for all race groups.

Regular two-week training courses for nurses were conducted at Himalaya House and will continue at Montanne House. These courses are run by the Department of Health.

Authority for additional staff was granted by the Department of Health, and four extra trained nurses were employed (2 White, 1 Indian and 1 African).

Factories

In 1974 a mobile clinic service was established for factories. This service has proved to be very popular, and has been extended to 82 factories, where the attendances for the year totalled 11 680 (1975 : 8 249).

Clinic Attendances

Details of attendances at family planning clinics are tabulated as follows:-

Community and Venue	Sessions	First Attendance	Re-attendance	Total 1976	Total 1975
<u>White</u>					
Warwick Avenue	96	380	2 780	3 160	2 553
<u>Coloured</u>					
Austerville	120	588	3 807	4 395	4 081
Himalaya House	547	131	1 633	1 764	1 756
Mayville	49	116	481	597	83
Red Hill	50	97	820	917	963
Sparks Estate	51	219	1 549	1 768	2 207
Warwick Avenue	53	129	797	926	1 209
Total	870	1 280	9 087	10 367	10 299
<u>African</u>					
Chesterville	104	339	907	1 246	875
Goodwins Cottage kwaMashu	100	599	2 540	3 139	5 013
Himalaya House	547	3 930	26 115	30 045	26 589
Lamontville	98	559	2 620	3 179	3 618
Lancers Road	147	872	3 883	4 755	4 643
Rydalvale, kwaMashu	199	1 514	4 905	6 419	8 331
Total	1 195	7 813	40 970	48 783	49 069
<u>Indian</u>					
Asherville	50	457	3 323	3 780	3 357
Chatsworth - Bayview	162	650	11 500	12 150	10 387
Chatsworth - Woodhurst	162	541	10 606	11 147	10 406
Chatsworth - Township Centre	252	1 426	15 477	16 903	21 214
Clairwood	99	248	2 028	2 276	2 346
Clare Estate	97	443	2 222	2 665	499
Himalaya House	547	725	11 002	11 727	13 500
Lancers Road	255	952	7 806	8 758	7 215
Merebank	151	499	7 442	7 941	8 848
New Farm	36	122	199	321	-
Newlands	104	273	2 417	2 690	2 678
Phoenix	87	60	388	448	-
Total	2 002	6 396	74 410	80 806	80 450
Grand Total	4 163	15 869	127 247	143 116	142 371

Of the 143 116 total attendances, 26 245 cases were seen by the Medical Officers compared to 27 249 in 1975.

The following table depicts attendances at the family planning clinics since their inception:-

Year	Attendances
1967	3 831
1968	13 744
1969	19 097
1970	26 105
1971	41 594
1972	58 592
1973	71 589
1974	113 770
1975	142 371
1976	143 116

B. MATERNAL HEALTH - OTHER

(i) Antenatal Clinics

Antenatal clinics are conducted for Whites, Coloureds and Indians, who wish to be confined at home by listed midwives who are permitted under the Public Health Act, to practice within the municipal area of Durban. Due to the increasing popularity of hospital confinements this service is on the decrease.

Details of attendances at antenatal clinics are as follows:-

Details	White	Indian	Total 1976	Total 1975
Antenatal clinic sessions	4	79	83	71
Attendances	8	257	265	429
Rhesus Factor Tests	2	70	72	123
Exfoliative Cytology tests	2	67	69	111
Haemoglobin Tests	5	72	77	122
Kolmer/VDRL tests	2	69	71	114
Antenatal visits	-	9	9	66
Postnatal visits by Supervisor	-	115	115	216

(ii) Supervision of Listed Midwives

Details	White	Coloured	Indian	Total 1976	Total 1975
Certificated Midwives	-	2	-	2	2
Confinements	1	1	5	7	29
Non-certificated Midwives	-	1	17	18	23
Confinements	-	-	110	110	238
Midwives appliances examined	-	-	148	148	165
Visits to Midwives at home	-	-	9	9	141

(iii) Facilities for Maternity Cases

The following institutions provided accommodation for maternity cases:-

Institutions	Maternity Beds				
	White	Coloured	Indian/ African	Total 1976	Total 1975
1. <u>Provincial:</u>					
Addington	57	44	-	101	101
King Edward VIII	-	-	246	246	239
R.K. Khan	-	-	89	89	86
2. <u>Private:</u>					
St. Aidan's	-	-	28	28	28
St. Augustine's	30	-	-	30	30
Parklands	35	-	-	35	35
Mothers'	42	-	-	42	42
McCords Zulu	-	-	65	65	60
Shifa	-	-	11	11	11
Total	164	44	439	647	632

(iv) Cervical Exfoliative Cytology

Since 1963 the City Council has offered a free cervical exfoliative cytology service to Durban women through their private medical practitioners. The microscopic examination is undertaken by the Natal Provincial Hospital Laboratory Services. In 1976 the State Health Laboratory extended their facilities, thus enabling this department to increase its service to a larger number of women, attending family planning clinics.

EXFOLIATIVE CYTOLOGY

EXAMINATIONS

YEAR : 1976

AGE GROUP IN YEARS	WHITE			COLOURED			AFRICAN			INDIAN			TOTALS		GRAND TOTAL	CONFIRMED MALIGNANCY	
	Ini-tial	RA	Total	Ini-tial	RA	Total	Ini-tial	RA	Total	Ini-tial	RA	Total	Ini-tial	RA		1976	1975
Under 30	3 510	1 995	5 505	107	8	115	826	15	841	1 449	50	1 499	5 892	2 068	7 960	5	3
30-39	1 829	1 842	3 671	127	4	131	938	40	978	1 348	149	1 497	4 242	2 035	6 277	12	6
40-49	928	1 117	2 045	22	1	23	205	10	215	213	57	270	1 368	1 185	2 553	2	-
50-59	380	586	966	2	-	2	5	-	5	11	1	12	398	587	985	3	2
Over 60	151	209	360	-	-	-	-	-	-	-	-	-	151	209	360	3	2
Not stated	260	159	419	6	1	7	48	1	49	66	5	71	380	166	546	1	-
TOTAL	7 058	5 908	12 966	264	14	278	2 022	66	2 088	3 087	262	3 349	12 431	6 250	18 681	26	13

RA : Repeat Annual

The total number of first and repeat cytology examinations and the number of cases of confirmed malignancy are set out for the last five years, in the following table:-

Year	Total Examinations	Repeat Examinations	Cases of Confirmed Malignancy
1972	15 599	4 524	16
1973	15 686	5 338	25
1974	18 374	6 442	14
1975	18 770	7 420	13
1976	18 681	6 250	26

C. CHILD HEALTH

(i) Clinics

Clinics were held at 38 venues for all races throughout the municipal area. The premises for Whites, remain mainly hired church halls. Two clinic venues for Indians were established in temporary premises at Phoenix and New Farm during the year.

The main functions of these clinics are to maintain and promote the health of the family. Advice and education is given to mothers, mainly on the care of their infants and toddlers, the maintenance of a high level of immunity among their children against certain infectious diseases, as well as general household management.

Details of clinic sessions and attendances are shown in the following table:-

<u>WHITE</u>		
Clinic Venue	Sessions	Attendances
Bellair	23	577
Brighton Beach	47	1 007
Cunningham Road	12	299
Durban North	52	3 610
Fynnlands	50	3 602
Hillary	27	1 079
Montclair	52	4 379
Old Fort Place	49	1 127
Overport	98	3 289
Point	47	3 633
Red Hill	28	702
Sea View	47	1 365
St. James	52	2 604
St. Mary's	52	2 451
Warwick Avenue	200	9 637
Wentworth	52	2 050
Westridge	50	923
Woodlands	52	2 098
Total (1976)	990	44 432
Total (1975)	985	48 651

<u>COLOURED</u>		
Clinic Venue	Sessions	Attendances
Austerville	198	23 222
Mayville	52	4 968
Red Hill	51	3 700
Sparks Estate	201	10 819
Warwick Avenue	99	3 701
Total (1976)	601	46 410
Total (1975)	587	53 393
<u>AFRICAN</u>		
Chesterville	210	15 554
Goodwins Cottage	299	26 362
Lamontville	397	28 635
Lancers Road	147	7 535
Rydalvale	423	54 146
Total (1976)	1 476	132 232
Total (1975)	1 433	122 883
<u>INDIAN</u>		
Asherville	94	11 552
Bayview, Chatsworth	272	26 068
Clare Estate	195	14 869
Clairwood	187	10 583
Lancers Road	252	26 692
Mayville	100	8 315
Merebank	226	19 785
New Farm	49	1 892
Newlands	178	13 408
Phoenix	71	1 618
Township Centre	492	67 330
Woodhurst, Chatsworth	262	20 495
Total (1976)	2 378	222 607
Total (1975)	2 186	229 565

Comment

There was a decrease in attendance in the White, Coloured and Indian groups, while the African attendances showed a slight increase. Various factors are responsible for these changes. Firstly, the Department of Health froze certain posts when they became vacant or were vacant at the time, thus reducing the number of Community Health Nurses

available for this work; secondly, as the table below shows the annual total number of live births is now on the decline reducing the number of possible attenders (especially among the Whites) and thirdly, it appears that there are more working mothers who now arrange less frequent visits to clinics.

TOTAL LIVE BIRTHS

Year	White	Coloured	African	Indian	Total
1972	3 410	1 674	9 739	9 449	24 272
1973	3 309	1 634	9 346	9 472	23 761
1974	2 910	1 642	9 657	9 742	23 951
1975	2 887	1 601	9 293	9 714	23 495
1976	2 650	1 456	8 578	8 925	21 609

Summary

The total number of clinic sessions and attendances for all community groups was as follows:-

Details	White	Coloured	African	Indian	Total 1976	Total 1975
Clinic Sessions	990	601	1 476	2 378	5 445	5 191
Attendances	44 432	46 410	132 232	222 607	445 681	454 492
New Cases	2 704	1 582	10 601	10 503	25 390	22 822

(ii) Home Visiting

New births of all race groups occurring in the City of Durban are visited in their homes immediately after discharge from hospital. Other home visits are carried out in relation to immunisation, family planning, mental health, and general problems of infant and child care. Visits to aged persons are also undertaken.

Following requests by Durban Child Welfare and Durban Indian Child Welfare, a total of 54 visits was made to White and Coloured protected infants and 20 visits were carried out for cases of alleged child neglect where investigations were required regarding the health of the children.

The following table reflects the analysis of home visiting:-

HOME VISITS

Community	Number of Premises Visited	I N V E S T I G A T I O N S												
		(a) New Births	(b) Behaviour Problems	(c) Routine	(d) Family Planning	(d1) Defaulters	(e) Feeding Advice	(f) Illness	(g) Immunization	(h) Mental Health	(i) Health Education	(j) Miscellaneous	(k) Wasted	Total
White	9 502	2 378	30	1 478	288	8	1 080	425	966	236	3	752	2 428	10 072
Coloured	5 367	1 274	9	764	434	255	153	171	1 460	74	22	627	456	5 699
African	9 962	2 552	14	1 564	837	72	625	205	3 159	49	38	711	1 977	11 803
Indian	13 911	8 015	-	2 011	175	102	104	41	552	23	16	1 021	2 183	14 243
TOTAL: 1976	38 742	14 219	53	5 817	1 734	437	1 962	842	6 137	382	79	3 111	7 044	41 817
TOTAL: 1975	35 937	14 250	129	4 878	3 807	558	2 052	1 156	5 551	400	42	2 846	6 192	41 861

(iii) State-Subsidised Feeding Scheme

The State subsidised P.V.M. powder has still not been accepted very favourably by the public, despite intensive health education and demonstrations at the clinics, as well as having the flavour altered. A total of 5 468 packets sold at 20c per packet, and 760 packets were issued free to indigent cases.

(iv) Other Dietary Assistance(a) Port Natal Bantu Affairs Administration Board

The Board has assisted with half cream dried milk which is issued free to cases in need within the African townships.

(b) Malnutrition Relief Fund

During the year 13 273 packets of full cream dried milk were sold at 20c per packet and 14 755 packets of a high protein pre-cooked cereal at 10c per packet.

(c) Feed the Babies Fund

A limited amount of pre-cooked cereal, was made available for free issue to deserving cases in the Lamontville and Chesterville areas.

(v) Kwashiorkor

From deaths notified of children under the age of five years, 37 were due to kwashiorkor, associated with pneumonia or gastro-enteritis. Of these only nine Africans and one Indian were City cases. All cases were investigated by Community Health Nurses and generally revealed parental neglect.

Deaths from malnutrition (including kwashiorkor) are reflected in the following table:-

Year	White	Coloured	African	Indian	Total
1967	-	3	19	5	27
1968	-	-	52	3	55
1969	-	-	45	-	45
1970	-	-	30	-	30
1971	-	1	38	1	40
1972	-	4	27	1	32
1973	-	1	11	-	12
1974	-	1	15	-	16
1975	-	1	18	-	19
1976	-	-	36	1	37

D. IMMUNIZATION

Facilities for free immunization are available at all family health clinics where immunization against diphtheria, whooping cough, tetanus, poliomyelitis, measles and smallpox, is carried out for babies from the age of three months. In addition, all schools are visited, and diphtheria tetanus boosters are given to all Class I pupils and a tetanus booster to Standard II pupils.

(i) Smallpox Vaccine

The number of vaccinations given is reflected in the following table:-

Vaccinations	White	Coloured	African	Indian	Total 1976	Total 1975
Primary	2 556	1 987	6 944	11 687	23 174	24 242
Re-vaccinations	131	47	2 174	103	2 455	4 563
Total	2 687	2 034	9 118	11 790	25 629	28 805

(ii) Poliomyelitis Vaccine

Details of doses given are shown in the following table:-

Age Group	Dose	White	Coloured	African	Indian	Total
Under 1 year	1st	2 748	1 613	8 018	9 938	22 317
	2nd	2 591	1 506	5 596	9 249	18 942
	3rd	2 552	1 479	4 023	8 637	16 691
	Total	7 891	4 598	17 637	27 824	57 950
1 - 4 years	1st	240	193	2 691	1 319	4 443
	2nd	200	176	2 151	976	3 503
	3rd	259	272	3 895	1 069	5 495
	Total	699	641	8 737	3 364	13 441
5 - 9 years	1st	131	74	256	479	940
	2nd	92	63	272	241	668
	3rd	91	50	956	325	1 422
	Total	314	187	1 484	1 045	3 030
10 - 19 years	1st	115	121	-	163	399
	2nd	73	70	-	89	232
	3rd	75	45	-	41	161
	Total	263	236	-	293	792
20 years and over	1st	259	2	2	-	263
	2nd	193	1	-	-	194
	3rd	166	4	-	-	170
	Total	618	7	2	-	627
Grand Total		9 785	5 669	27 860	32 526	75 840

The total for 1975 was 64 365.

(iii) Combined Diphtheria, Pertussis, Tetanus Vaccine

Full details of doses given are tabulated below:-

Age Group	DTP Dose	White	Coloured	African	Indian	Total
Under 1 year	1st	2 464	1 544	7 102	9 560	20 670
	2nd	2 327	1 498	4 708	8 725	17 258
	3rd	2 285	1 441	3 390	8 153	15 269
	Total	7 076	4 483	15 200	26 438	53 197
1 - 3 years	1st	89	107	814	777	1 787
	2nd	78	87	715	450	1 330
	3rd	128	140	887	465	1 620
	Booster	1 339	1 125	1 360	6 733	10 557
	Total	1 634	1 459	3 776	8 425	15 294
Grand Total		8 710	5 942	18 976	34 863	68 491

The total for 1975 was 57 983.

(iv) Combined Diphtheria and Tetanus Vaccine

Age Group	DT Dose	White	Coloured	African	Indian	Total
Under 1 year	1st	67	44	27	93	231
	2nd	63	29	110	133	335
	3rd	74	37	64	127	302
	Total	204	110	201	353	868
1 - 6 years	1st	67	121	677	645	1 510
	2nd	47	95	372	370	884
	3rd	52	107	385	236	780
	Booster	603	488	1 062	1 848	4 001
	Total	769	811	2 496	3 099	7 175
School Age	1st	17	44	11	260	332
	2nd	14	51	8	134	207
	3rd	18	35	2	49	104
	Booster	2 213	1 453	1 761	9 254	14 681
	Total	2 262	1 583	1 782	9 697	15 324
Adults		1	-	1	3	5
Grand Total		3 236	2 504	4 480	13 152	23 372

The total for 1975 was 27 330.

(v) Tetanus Vaccine

Tetanus immunization was administered mainly to school children as shown in the following table:-

Age Group	Dose	White	Coloured	African	Indian	Total
School Age	1st	8	47	-	154	209
	2nd	9	50	-	125	184
	3rd	5	23	-	16	44
	Booster	2 366	1 455	2 364	9 332	15 517
	Total	2 388	1 575	2 364	9 627	15 954
Adults	1st	31	-	3	3	37
	2nd	20	-	1	3	24
	3rd	16	-	-	-	16
	Booster	24	26	3	-	53
	Total	91	26	7	6	130
Grand Total		2 479	1 601	2 371	9 633	16 084

The total for 1975 was 15 035.

(vi) Measles Vaccine

This vaccine was administered as follows during the year:-

<u>White</u>	<u>Coloured</u>	<u>African</u>	<u>Indian</u>	<u>Total</u>
661	968	2 839	6 245	10 713

The total for 1975 was 11 260.

(vii) Rubella Vaccine

Rubella vaccine was administered to 973 Standard 6 girls at White schools.

(viii) Cholera

In 1973 a programme was commenced to immunize sewerage workers from the City Engineer's Department against cholera. This programme has continued on a twice yearly basis, and a total of 3 304 doses was given.

(ix) Typhoid Control

Vi-testing was carried out throughout the year for selected food handlers and typhoid vaccine was given.

The following table reflects the vi-tests performed:-

Vi-Tests	White	Coloured	African	Indian	Total
Blood Samples	1	1	336	25	363

The total for 1975 was 454.

The following table reflects the doses of typhoid vaccine given:-

TAB Vaccine	White	Coloured	African	Indian	Total
1st Dose	476	252	11 504	20 657	32 889
2nd Dose	351	228	7 506	14 658	22 743
3rd Dose	1	-	-	1	2
Booster	19	-	232	98	349
Total	847	480	19 242	35 414	55 983

The total for 1975 was 2 874.

The dramatic increase in the number of typhoid injections given is due to the "Tin Town" floods in March, when a special typhoid immunization campaign was carried out in the flooded areas.

E. GENERAL(i) Creches and Day Care Centres

Places of care for children from birth to six years are registered with the Departments of Social Welfare and Pensions, Bantu Administration, Indian and Coloured Affairs. All new creches are inspected by this department for registration and licensing and a report submitted to the respective departments concerned. Nine new creches giving all day care and accommodating 403 White children were registered during the year. Also one care centre was

registered to cater for shoppers on a three hour basis, in the City centre.

One Coloured nursery school capable of accommodating 70 children was registered.

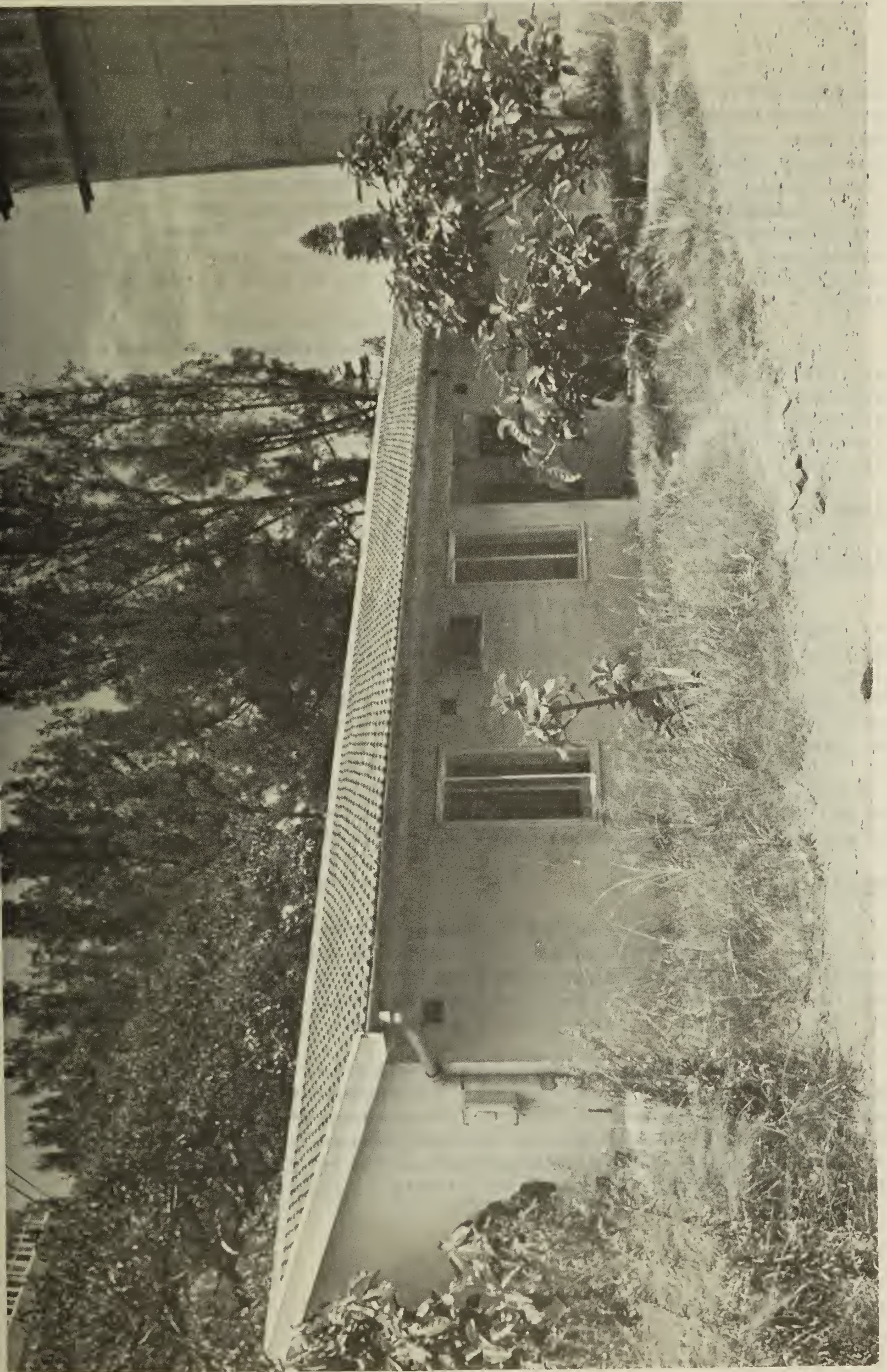
In addition there are 20 licensed child minders who are permitted to care for not more than six children of pre-school age. There are also five places of care registered to care for school children in the afternoons. These are providing an invaluable service to working mothers.

(ii) Psychiatric Training

Two Community Health Nurses were granted study leave (1 November 1975 - November 1976), to attend the State course at Town Hill Hospital, Pietermaritzburg, and both were successful in their examinations.

(iii) Student Training

Diploma in Community Health nursing students; student midwives from Addington and Mothers'hospitals; student and pupil nurses from Addington, St. Augustine's, Entabeni, King Edward VIII and R.K. Khan Hospitals; Diploma in Nursing students from the University of Natal; medical students; pharmacy students and town planning students attended for various periods of in-service training and observation at the department's family health and family planning clinics.



Sydenham Hotel site: Office building donated by contractors for specific use of this department.

VII. COMMUNITY LIAISON

In March, the first Community Liaison Officer resigned for domestic reasons and a replacement was effected immediately. A Deputy Community Liaison Officer was appointed in May. In the first half of the year machinery was also put into action for the recruitment of additional staff to fill vacancies for ten Community Liaison Workers. Great difficulty was experienced in finding suitable applicants. These vacancies were advertised again in December and it is anticipated approximately five will be filled early in 1977.

In addition to the aforementioned posts there are three vacancies for Senior Community Liaison Workers. These posts will not be advertised until the section is well established, by which time it is hoped there will be suitable candidates from within the section.

COMMUNITY PROJECTS

Sparks Estate

An office building erected within the precincts of the Sydenham Hotel site was donated to the City Council by the contractors who have erected 360 flat units on this site. It is intended that this building be used by various sections of the City Health Department for a multiplicity of purposes all directed towards the uplifting of the community.

The section was closely associated with the Architectural Branch of the City Engineer's Department in planning community facilities for the Villa Road complex.

Austerville

The Department of Community Development agreed to place certain premises at the disposal of the department for community liaison work. These will, of necessity, be small but will serve as a nucleus for the activities of this section in the Austerville area.

The demonstration garden at the clinic has been maintained and produce is sold to those attending the clinic at a nominal price. The community, however, has evinced little interest in the maintenance of the garden at the clinic, and future policy will be directed towards the establishment of gardens within residential areas.

A demonstration of garden trenching was given at the Sheltered Employment Workshop after a request from this group to initiate a garden there. This garden has not been maintained due to lack of interest.

An enquiry was made of the Director, Hospital Services, as to the possibility of establishing an antenatal clinic at the Wentworth Hospital to serve the residents of Austerville/Wentworth. Both physically and financially the long journey to the Addington Antenatal clinic is a demanding one and many expectant mothers do not attend.

Tent Town

The temporary settlement of victims of the flooded Tin Town area brought many problems most of which were successfully resolved by the formation of a Vigilance Committee. This was effected with the co-operation of a voluntary Indian welfare worker. Members of the Vigilance Committee maintained order by patrolling the area at night and by the introduction of a rota system for use of the limited cooking and washing facilities. The enlistment of the Indian Boy Scouts movement to organise activities for the children proved most fruitful.

Repeated heavy rain flooded many tents. A generous donation of timber flooring by a local businessman enabled numerous residents to instal raised flooring to obviate flooding problems.

Phoenix

Discussions took place with the housing section of the City Engineer's Department on the proposed town centre and community facility requirements. Plans for the community centre envisage, inter alia, a community hall for recreational purposes, together with a defined area for garden allotments.

While occupation of the Phoenix Township commenced in July, some two months elapsed before the first school opened. Truancy was a problem and the incidence of dagga smoking amongst children of early primary school age was cause for concern.

Apart from the school and the City Health clinic, absence of the basic community facilities to serve this isolated area 25 kilometres out of town created difficulties for residents. In an attempt to counter the increasing number and complexity of social problems which arose,

responsible organisations were successfully approached to take an active interest in the area.

The assistance of the Indian Education Department was enlisted and an Indian physical instructor was appointed to the school. This instructor also conducts extra mural activities for the children and has been responsible for the creation of the Phoenix Sporting Club for adults.

Male residents of Phoenix volunteered to form a Township Vigilance Committee and as a first step, are to enlist as police reservists.

As the existing track leading to the Railway Station was unlit and thus a potential invitation to crime, arrangements were made to have this situation rectified.

Newfarm

The presence of large numbers of starving, neglected dogs led to a request being directed to the S.P.C.A. for a mobile clinic to visit the area. With the assistance of members of the health inspectorate and the health education section, residents were motivated to bring their animals for treatment.

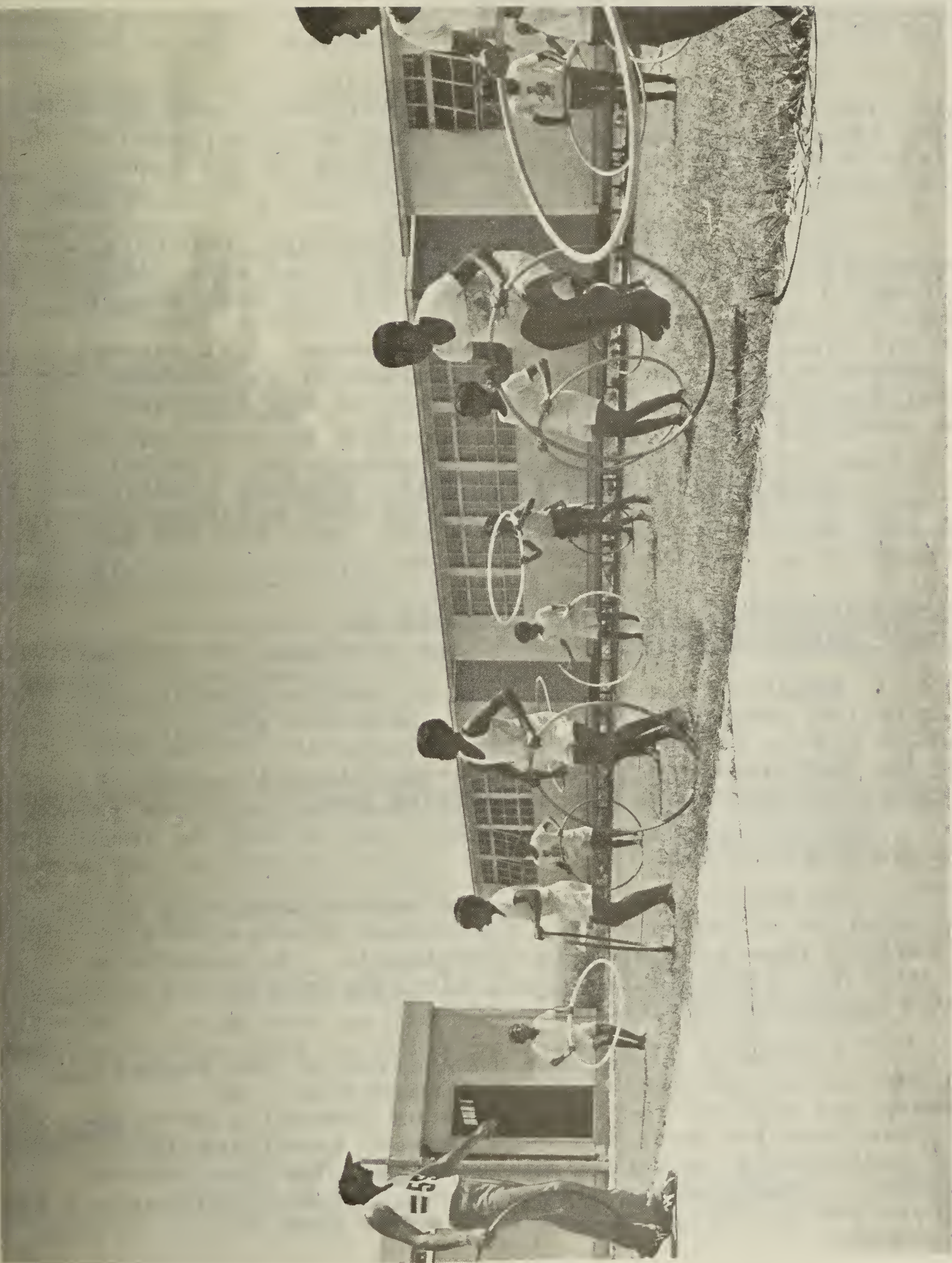
Response to the appeal and attendance at the clinic was very rewarding. Altogether, 182 dogs were brought and of these 32 were treated and 11 destroyed. Treatment was, of necessity, superficial and no immunisation was undertaken. The S.P.C.A. is to establish regular clinics to serve the Phoenix, Newfarm and Effingham areas as from July, 1977.

Chatsworth

A meeting of representatives of all welfare, educational and related bodies operating in Chatsworth was called in order to assist members of a large foundation (Bernard van Leer Foundation) in the preparation of preliminary plans for the establishment of a model day care centre unit in Chatsworth (Unit 3).

A garden demonstration in the clinic grounds of Unit 6 was well attended by local residents. A talk on the preparation and maintenance of a garden was given by the health educator. This garden continues to be maintained.

Close liaison was maintained with the City Engineer's Department on proposed designs for community facilities in the area.



Phoenix Primary School: Extra Mural Activities

Clare Estate

The heavy shale content of the soil necessitated excavation and filling with suitable soil before a demonstration garden could be successfully established at the clinic. This has continued to be maintained.

Physically and Mentally Retarded Indian and Coloured Children

In response to an urgent appeal by the Durban Mental Health Society, exhaustive efforts were made to secure temporary accommodation for such children hospitalised as a result of cruelty and neglect in the home. There are no residential centres in Natal for these cases.

Because attempts to obtain suitable temporary accommodation were unsuccessful, active steps were taken to secure a suitable site in Phoenix for the erection of a home for Indian children. Following negotiations with the Department of Community Development full support was subsequently given to an application by the Durban Mental Health Society for a 100% loan for the erection of a permanent home.

As a further result of this exercise, plans for the erection of a house for 37 Coloured children in Sparks Estate by Cheshire Homes have been revised to accommodate an additional 20 children.

Protected Workshops for White and Indian Mentally Retarded Persons

Negotiations are in hand to secure premises for affected members of the White population group. There is also a pressing need for alternative accommodation for Indians as the premises presently being used in Briardene are now zoned for industrial use.

Aryan Benevolent Home

In December a fire caused severe damage to four dormitories of this home for Indian aged persons and left 60 inmates virtually 'homeless'. Arrangements were made to establish temporary sleeping quarters for those affected by the fire.

Following an on-site inspection of the damage with members of the Indian Affairs Department, an approach was made to the Department of Community Development from whom the premises were leased, resulting in their undertaking to repair the building over the school holidays. Subsequently this Department undertook to motivate for the early erection of a new home in Chatsworth.

GENERALUse of School Premises

Because of the dearth of community facilities the Departments of Indian and Coloured Affairs were asked to give consideration to the use of school premises by outside organisations. This suggestion was favourably received by both departments.

Establishment of an Emergency Depot

Preliminary investigations have commenced to motivate for the establishment of a depot carrying a reserve supply of blankets, bedding, etc. which could be drawn upon in times of a relatively minor emergency. Every support has been offered by the Red Cross. It is intended that such depots will be established, maintained and run by members of the community.

Student Training

Following a visit of observation to the department by Professor de Bruin of the University of South Africa (UNISA), arrangements were made for the placement of social work honours students to do practical work under the guidance of this section.

Spina Bifida Association

Assistance was given in defining the duties and relationship of committee members and the role of an executive committee.

Physical Planning

Close liaison has been established with the Town Planning and Architectural sections of the City Engineer's Department on preliminary planning of recreational and community facilities.

Grants in Aid

Discussions took place with staff of the City Treasurer and Town Clerk's departments regarding the allocation of grants in aid to charitable organisations and the regulations controlling unauthorised house-to-house collections.

Toy Library

A venue was found for this service and the project was officially handed over to a voluntary committee.

Crisis Clinic

Assistance was given to the Department of Social Welfare and Pensions in preliminary plans for the establishment of a 24-hour crisis clinic.

Symposium on Housing for the Aged

The Community Liaison Officer spoke on "Practical measures for the retention of the aged within the community and for reducing the need for institutional care" at a Symposium on Housing for the Aged arranged by TAFTA.

Valley Trust

Arrangements were made for staff of the health education, health inspectorate, family health and community liaison sections to visit the Valley Trust at Botha's Hill.

Employment Bureau

Preliminary investigations were made into the feasibility of establishing a "casual" employment bureau for unemployed persons.

Child Welfare

The need to form independent child welfare bodies in both Phoenix and Chatsworth was discussed with representatives of the South African National Council for Child Welfare. Phoenix is presently served by the Verulam, and Chatsworth by the Durban Indian Child Welfare Societies.

Talks

Talks on community liaison were given to departmental staff, the Berea Ratepayers' Association, Social Work students of the Durban/Westville University and Learner Planning Technicians of the City Engineer's Department.

VIII. HEALTH INSPECTION

During the year this section was restructured so that not only the organisational efficiency would be improved but also, by the creation of extra senior posts, there would be greater opportunities for promotion thereby discouraging resignations.

Success has been apparent in that five learner health inspectors within the department who passed their National Diplomas, remained in the department on promotion as Health Inspectors, whereas in the past the tendency has been for newly qualified candidates to seek employment with other local authorities which were offering better salaries and fringe benefits. Furthermore, two Health Inspectors were recruited from outside the service and, although there were two resignations, one of these was re-employed.

In spite of the improved situation, there were never the less still 13 vacancies for Health Inspectors at the end of 1976.

The continued employment of unqualified Health Assistants, whose salaries are not subject to State part-refunds alleviated the problem to some extent in that they performed investigations into complaints of a minor nature and also carried out simple routine duties.

The department received 2 990 complaints from the public, excluding those in respect of pests, during the year. These complaints are analysed as follows with the previous year's figures in parenthesis:-

Animal keeping	17 (22)	Poultry keeping	109 (137)
Conservancy services	42 (21)	Refuse dumping	290 (403)
Drainage - appurtenances	76 (31)	Refuse removals	57 (19)
- defects	212 (329)	Sanitary accom-	
Food - unhygienic handling	64 (101)	modation	102 (117)
- unsound	70 (71)	Shacks(illegal)	3 (1)
Housing - illegal	26 (11)	Smoke/Air	
Miscellaneous	385 (285)	pollution	3 (5)
Offensive smells	165 (208)	Structural	
		defects	108 (202)
		Uncleanliness of	
		premises	367 (370)
		Vacant land	855 (948)
		Ventilation	7 (3)
			<hr/>
			2 990 (3 320)
			<hr/>

All these reports were promptly investigated and appropriate action taken.

INSPECTIONS

Visits carried out by the health inspectorate and ancillary personnel are summarised hereunder, the previous year's figures being in parenthesis :-

Food Handling Premises

Bakeries	373	(472)
Boarding houses/ private hotels	1 316	(1 086)
Butcheries	4 642	(4 274)
Dairies, milk depots, etc. (mainly ex- City)	3 856	(3 858)
Food Manu- factories	981	(853)
General/fresh produce dealers	13 217	(13 577)
Hotels(liquor licensed)	1 534	(1 326)
Milk bars	33	(4)
Offensive trades	358	(290)
Restaurant/ eating houses	10 258	(8 963)
Tea rooms	2 524	(2 148)
Sundry	4 009	(4 031)

Other Premises

Barracks/compounds	317	(322)
Dwellings	107 638	(113 392)
General dealers	4 586	(5 219)
Hairdressers	752	(1 031)
Laundries, dry cleaners and depots	791	(828)
Lodging houses/ flats	10 763	(11 384)
Offensive trades	775	(672)
Sundry - trading	11 460	(11 780)
- non-trading	58 603	(55 562)

Of these inspections, which totalled 238 831 (241 072), 15 996 were undertaken accompanied by another official. The following action was taken:-

Personal notices issued at time of inspection	16 681	(19 188)
Statutory notices served	3 956	(3 725)
Letters written	1 839	(1 767)
Prosecutions instituted (counts)	292	(358)

LICENSING/REGISTRATION(a) Trade Licence Applications

Reports on public health implications, respecting the state of premises and trades to be conducted therein, were submitted in connection with 3 098 (3 631) new applications lodged with the City Licensing Officer. Where departmental requirements or bylaw shortcomings had to be complied with, a further 1 103 (886) reports were submitted.

(b) Bantu Licence Applications (Housing)

The Director of the Port Natal Bantu Affairs Administration Board referred 12 (20) applications for permission to house African non-domestics, in terms of the Regulations under the Bantu (Urban Areas) Consolidation Act, No. 25 of 1945. Favourable reports were made where conditions were satisfactory.

(c) Animal Keeping Permits

Seventeen permits for the keeping of animals were renewed in terms of the Public Health Bylaws. The number of animals registered was as follows:-

460	(439)	equines
10	(10)	sheep
225	(220)	dogs (kept for reward in kennels)
4	(3)	bovines
40	(40)	goats
400	(400)	pigs

(d) Food Vending Vehicles/Machines

Registration under the Food Bylaws was granted for the following:-

(i)	mobile soft dairy mix dispensers	10 (20)
(ii)	soft-serve machines	68 (87)
(iii)	hawkers' vehicles	256 (167)
(iv)	pedlars' hand carts	1 (3)

(e) Modification of Food Bylaw Requirements

In terms of powers contained in the Food Bylaws, the City Medical Officer of Health granted 9 (14) certificates authorising the relaxation of minimum requirements, mainly in respect of storage areas.

(f) Dry Cleaners/Laundry Vehicles

A total of 9 (67) certificates of registration was issued.

(g) Fumigators

Seven certificates were issued in respect of new applications.

(h) Mattress-Makers/Upholsterers

The number of certificates issued was 38, all being renewals.

(i) Offensive Trades

The current list of permit holders involves 115 businesses, and the following new ventures were approved during the year:-

Cement works (fencing and concrete products)	5
Works dealing with bones (wholesale butchery)	1
Processing products from petroleum refining	1
Hides, skins and horns storage	1
Chemical works	1

An occurrence of significance to Durban during the year was the termination of off-shore whaling and the consequential closing down of the Bluff whaling station. Over recent years the catch diminished annually and the nuisance diminished correspondingly, but in earlier years the odour from the whaling activities was a 'well known' source of annoyance to residents in the southern parts of the City. The photograph depicts whaling in its heyday.

Seven other trades ceased operations and 11 applications were received for permission to extend, add to or alter existing buildings and plant. In each case the representation was supported by a 'pollution abatement report' in which the developer outlined the possible sources of nuisance and the preventive means proposed to be employed. Arising from these applications meetings were held with interested departmental representatives, and regular liaison meetings were held with the managements of the major industries.

A new brick manufacturing factory has been established in the Coedmore area making use of the excess 'dust' from the adjoining quarry. The full co-operation of the management was obtained during the whole planning period and no nuisance to the public or staff is expected, as the whole process is run on a 'closed' system.

A chrome factory which has experienced problems of environmental and internal pollution for many years has entered into a five year modernisation programme. An extensive system of dust extraction has been installed with very marked effect and a new plant for the extraction of chrome salts is nearing completion.

ENVIRONMENTAL HYGIENE

Town Planning

A one plot strip along either side of an arterial road traversing a residential area has been rezoned for industrial development. In consequence, numerous complaints have been received from occupiers

of adjoining residential properties regarding noise, offensive smells and dust. Investigations have failed to establish justification for the complaints, but have indicated a general local dissatisfaction regarding the zoning and consequential devaluation of residential property values.

Trade Waste

The recycling of waste paper, bottles and plastic is being carried on to a greater extent than in previous years. The management of one such operation has established a depot on premises in close proximity to residential properties, with the consequential occurrence of nuisances and irritation to residents. Endeavours are being made to enforce the removal of this business to a more appropriate locality.

Illegal Dumping

This practice continues to be a problem particularly along access roads to suburban townships where drivers are inclined to deposit factory waste on their way home as a matter of convenience and to save refuse tip charges. Where identification is possible, legal action is taken against offenders.

A large built up area comprising several blocks and some 7 ha in extent, acquired in the lower Berea for the purpose of establishing a new technical college complex, has been a source of worry to the department in respect of illegal dumping. Fortunately the campus is now being developed. Certain buildings have been retained and following extensive renovations these are being used as lecture rooms and residential accommodation for students. Security fences are being erected to prevent further illegal dumping.

Derelict Vehicles

The Council's programme for the disposal of derelict and disused vehicles which are an eyesore and in some cases a health hazard, has progressed well through the year. In so far as private properties are concerned, health inspectors served 1 446 notices requiring the removal of 2 504 vehicles. By the year end 1 332 vehicles had been disposed of privately and a further 195 removed by contractors engaged by the City Council. The contract was reviewed towards the end of the year and a new contractor engaged for a two year period. It would seem that lasting benefits will accrue from an energetic clearance programme along these lines.

Vacant Buildings

Freeway development and other property expropriations resulted in a number of buildings becoming vacant pending demolition. These buildings are frequently then occupied illegally by vagrants and other undesirable persons and insanitary conditions result. Notices are served on the owners and on occasion this department initiates the cleansing at the expense of the owner in default. Every effort is made to ensure timeous demolition or other adequate measures in order to avoid or abate these conditions, but delay is often experienced due to the necessary process of transfer of ownership.

Drainage Defects

The builder of a dwelling on the Bluff was called upon to install an unorthodox means of drainage, designed by consultants, for the disposal of septic tank and other household effluent so as to obviate a possible landslide on the seaward side of Marine Drive. The system required that the effluent be discharged into a 150mm pipe sunk into the ground to a depth which would take the fluids below the slip plane. This drainage became clogged after about two weeks' use and it was then found necessary to carry out remedial measures, in default, which the owners of the property failed to do so under notice. The method adopted was to allow for the discharge of the effluents via a conventional soak pit constructed in a position further back from the bank and at sufficient depth to lie below the slip plane.

Difficulty was experienced at several dwellings in a new housing estate due to the high water content of the soil, in that effluent from septic tanks was not absorbed into the ground, resulting in seepage and offensive smells. As a temporary measure, agricultural drains were constructed to drain off the water in stormwater drains. The properties will be given priority for connection to the sewerage system as soon as it becomes available.

Storm Drainage

In March of this year the Umgeni River, its tributaries and other local streams flooded after three days of torrential rain (see Appendix D). Members of the staff were involved in emergency measures and the later rehabilitation of displaced persons. Cleaning up operations were required to be carried out for some weeks following the flooding.

Harbour Pollution

During the Christmas holiday weekend large numbers of fish were found dying in the harbour, apparently due to an oxygen deficiency in the water. Urgent endeavours were made to establish the type, extent and source of contamination but this could not definitely be established. It was suspected that a quantity of waste acid had been the cause of the fish mortality.

Sea Bird Mortality

Following reports from a local beach inspector, large numbers of dead and dying terns were found on the sea shore, and specimens were submitted for analysis. Botulism was suspected, due to the birds' habit of eating discarded fish bait and other waste, but post mortem examination failed to reveal the cause of death. It was therefore concluded that the plight was a result of exhaustion and starvation caused by the exceptional heat experienced locally at the time, and high winds which followed, both of which unsettled the normal feeding habits of the birds.

Municipal Undertakings

Misuse of the open space in the vicinity of Southampton Street at the Point caused by loiterers near the compound there and the lack of public toilet facilities was alleviated by the building of a block of conveniences. This amenity was brought into operation during December 1976 with a resultant considerable improvement in conditions.

Public Gatherings

Numerous public gatherings were held during the year including rugby, cricket, soccer and horse racing events where large numbers of people gathered for periods of short duration. Inspectors were on duty at all these functions to ensure that necessary measures were implemented for the maintenance of satisfactory and adequate sanitary and food hygiene arrangements. Travelling shows and religious gatherings were also supervised to ensure the provision of adequate temporary sanitary accommodation.

FOOD HYGIENE

In terms of the regulations relating to food inspection under the Public Health Act, 1919, large quantities of a variety of foodstuffs and produce were inspected, and where found to be unsound were either seized by the health inspectorate or voluntarily surrendered by the owners. Inspections at the National

Fresh Produce Market, together with inspections of foodstuffs at wholesale and retail outlets resulted in the condemnation and destruction of the following foodstuffs as unfit for human consumption:-

(a) National Fresh Produce Market

17 555 bags/pockets	Beetroot, bringals, butter-nuts, cabbages, carrots, cucumbers, cauliflowers, chillies, green beans, green peas, grape fruit, grenadillas, leeks, lemons, mangoes, marrows, onions, oranges, mealies, potatoes, sweet potatoes, hubbard squash and sweet melons.
6 096 boxes/crates/ trays/cartons	Apples, apricots, avocado pears, baby marrows, bringals, green beans, green peppers, lettuce, mangoes, naartjies, peaches, pears, plums, prickly pears, pineapples, tomatoes, spanspek, sweet melons and turnips.

(b) Other Traders

218 727 tins/bottles/ packets	Fish, meat, jam, vegetables, soup, sauces, pickles, cereals, meal, sweets, pasta, etc.
27 719,15 kg	Biltong, cheese, flour, fresh fish, ginger, lemon peel, processed and frozen meats, rice, sugar and sweets.
34 414 metric tons	Peanut butter.
212 cartons	Mock cream, pasta and sweets.
40 sacks	Dried fish.

Reasons for condemnation of other items included containers which were blown, rusted, dented, leaking or broken; cereals, meal and pasta products which were weevil infested; and foodstuffs contaminated by rodents or chemicals, had deteriorated or were mouldy, as well as those that were unfit through age.

In addition, refrigeration breakdowns at supermarkets, shops, wholesalers and butcheries caused decomposition and necessitated condemnation of the following foodstuffs -

20 596 packets/units	Frozen vegetables, fish, poultry and processed meats.
8 950,5 kg	Frozen vegetables, fish, poultry, processed meats and cheese.
1 102 litres and 1 604 cartons/ containers	Ice cream, yoghurt, buttermilk and fresh milk.

Food Sampling

(1) Chemical Analyses

In accordance with the powers delegated in terms of the Foodstuffs, Cosmetics and Disinfectants Act, No. 54 of 1972, 620 samples of foodstuffs were purchased at shops and food manufactories throughout the City and submitted for analysis to the State chemical laboratories in Pretoria. Resulting therefrom, legal proceedings were instituted in 11 cases and a letter of warning sent to one food manufacturer. Fines paid in respect of the legal proceedings amounted to R540.

(2) Bacteriological Examinations

In accordance with the Food Bylaws which require ready-to-eat foodstuffs to comply with certain bacteriological standards, 227 samples were taken from restaurants and submitted for examination. Where the results were unsatisfactory, appropriate action was taken.

In order to assess the standard of hygiene in local meat factories, swabs were taken from meat products, tables, equipment and foodhandlers' hands for bacteriological examination. Where results indicated contamination, managements were advised to carry out improvements in the foodhandling techniques.

Culture specimens using the "Agar sausage" method were taken from food utensils, equipment, wall surfaces and food workers' hands at 335 food premises during the year. Proprietors were informed of the results and, where these were unsatisfactory advised on ways of improving their sanitisation methods.

The department continued its programme of sampling crayfish and molluscs along the local foreshore to monitor for faecal contamination. Some years ago the department requested the Natal Parks, Game and Fish Preservation Board to continue with a public ban on the collection of crustacea and molluscs on the foreshore between the Umgeni and Isipingo Rivers until conditions were considered safe. During the year, 19 marine samples were taken of which 8 yielded unsatisfactory bacteriological results.

Food Complaints

Complaints by members of the public included "rope" infection in kuhne bread; mouldy and rodent-gnawed bread; cockroaches, a sponge, split-pin, and a piece of ceramic tile baked into loaves of bread; a cockroach in a bottle of peanut butter and in a curry roll; a fly embedded in a piece of cheese and in a sausage roll; a piece of biltong infested with beetle larvae; a cockroach egg in a mineral water bottle; and other foreign objects in other bottles; hair embedded in the crust of a sandwich; tin embedded in a sausage roll; a fish hook embedded in a piece of cooked fish; a cigarette end in a packet of pre-wrapped meat; and a metal washer in a piece of pie.

Several complaints of weevil-infested cereals and unsound and/or outdated foodstuffs also received attention. Appropriate action was taken in all instances including prosecution of offenders when the complaint was substantiated by affidavit and the occurrence was considered to be due to negligence.

Following a report from a large private hospital of suspected food poisoning amongst their African staff, investigations disclosed that the situation had probably been caused by the affected personnel consuming "left over" curried chicken. The management was advised accordingly.

Public Gatherings

Health Inspectors were in attendance at all large scale public functions including race meetings, cricket and rugby international and provincial games, religious gatherings, festivals, etc. to ensure the maintenance of satisfactory food and general hygiene standards.

During holiday seasons and long weekends when the beaches were heavily patronised, inspectors were on duty to encourage optimum hygienic practices by beach-front caterers.

Regular early morning and late evening inspections of food premises and food deliveries were also carried out.

Food Surveys

Premises used for the manufacture, preparation, serving and handling of food were accorded special attention by the inspectorate with emphasis on structural, furnishing and hygiene standards.

The results of the inspections were as follows:-

Establishment	Premises	Inspections	Notices Served
Butcheries	267	3 005	456
Restaurants	538	5 143	919
Liquor-licensed premises	146	1 097	216
Food factories	99	639	98
Boarding houses, etc.	189	1 404	146
Total	1 239	11 288	1 835

Illegal Hawking/Selling

The problem of illegal hawking/selling continued, mainly in the central City and Maydon Wharf areas and was referred to the City Police who either issued spot summonses and/or confiscated the goods concerned in conjunction with the South African Police. Perishable foodstuffs, especially meat and offal so detained, were destroyed by incineration at the Durban Abattoir as being unfit for consumption.

NON-WHITE AREAS

Chatsworth

The health inspectorate based at the branch office of this large Indian township in the southern part of the City, of some 170 000 persons, consists of one Senior Health Inspector and four Health Inspectors plus ancillary personnel (all Indian). The granting of subsidised locomotion allowances to the Health Inspectors enhanced the mobility and consequential productivity of this branch.

Floods

Washaways during March resulted in damage and temporary closure of two thoroughfares in Chatsworth, namely the bridge over the Umhlatuzana River giving access to Chatsworth via the Chatsworth Main Road, and Klaarwater Road at its intersection with Bulbul Drive. Both rights-of-way were reopened shortly afterwards as a matter of urgency.

Water supply interruptions were widespread during this period and included most areas of the township and the neighbouring localities. Temporary distribution of water was undertaken by the City Engineer's Department using three trucks carrying 20/25 new drums each to the stricken areas. Approximately 100 water-main bursts received attention.

Widespread damage to buildings, some major, was referred to the City Engineer for attention in the various housing units. There were five known cases where dwellings were evacuated due to storm damage but temporary repairs were carried out and the tenants returned home.

Damage, generally, was as follows:-

- (a) foundation wash aways and damage to soil pipes within dwellings: 26;
- (b) flooding/silting of dwellings: 12;
- (c) banks collapsing (no house damage): 65;
- (d) internal damage, due to seepage: 43;

An investigation into the pollution of the Umlaas River by sewage discharged into the Klaarwater Road area revealed that this was due to the repair of sewer mains, damaged by the floods. This matter received prompt attention by the City Engineer's Department.

Mosquito conditions occurred during this rainy period in Oribi Circle, Jupiter Square, Fiona Street and Road 917. Insecticidal spraying operations were carried out.

Shopping Facilities

Stores are still urgently needed in most units as the public has perforce to rely on mobile food vending which is by no means an ideal method of trading. Regrettably shops are sadly lacking in Units 1, 6, 7, 8, 9 and 11. A new shopping block including food shops was, however, commenced in Unit 6 at Roads 604/6/9 by private enterprise and this will fulfill a long felt need in this area.

New Butchery

A proposal in the form of plans submitted to this department was made to convert approximately nine stalls at the market at Unit 3 shopping complex into a butcher shop but so far building has not begun. These stalls have remained vacant since the opening of the market.

Unit 5 Shops

This shopping complex has now changed ownership from the Department of Community Development to private enterprise.

Closure of Food Premises

A restaurant at Mobeni Heights which operated on an on-consumption basis was closed to the public and will possibly change ownership prior to trading re-commencing.

Food Sampling

Bacterial sampling of ready-to-eat foodstuffs was conducted during this period as a result of which E. coli Type 1 was isolated in two instances and warnings had to be issued to the managements. Also, regular Agar Sausage samples were taken at all food premises and, generally, the results were satisfactory.

Extra-duty Inspections

Early morning inspections were made one morning each month when checks on food deliveries and food premises were made.

Food Hawkers

Licensees were required to produce vehicles for re-inspection, and owners of unregistered vehicles received a preliminary warning to arrange for proper registration in terms of the Food Bylaws. This will be a regular procedure in this area in order to update and maintain hygienic food handling standards particularly in view of the reliance residents are having to place on mobile selling because of the paucity of shopping outlets.

Garden Projects

In collaboration with the department's Community Liaison, Family Health and Health Education sections, a model vegetable garden was laid out at the Unit 6 clinic by the health inspectorate, in an attempt to encourage residents to produce home-grown vegetables.

Pest Control

The rising incidence of rodent colonies in the vacant land adjoining the Unit 3 shopping complex called for anti-rodent measures being taken in the section bounded by Roads 338 and 339. Similar measures were carried out on verges along Road 517 (with 18 carcase recoveries).

Due to indiscriminate refuse dumping along Road 901 (near the Higginson Highway) prolific fly development occurred. Anti-fly measures were promptly undertaken and the nuisance was eliminated.

Mosquito development in stagnant pools of water along Fiona Street in Mobeni Heights was also dealt with.

A sewer blockage occurred in Strelitzia Road (Silverglen) in mid-October and caused a large accumulation of sewage to stagnate in a low lying area in the vicinity. Prolific mosquito development was treated by this department, and the cause of the blockage was removed.

In another instance, an unauthorised deposit of what appeared to be sewage on vacant Corporation land at the corner of Fiona Street and Riviera Road, Mobeni Heights was observed to be causing fly breeding. Anti-fly measures were conducted and the offending material covered with soil.

Housing and Population Surveys

During the latter part of May all available staff at Chatsworth were diverted to a detailed survey of the Welbedagt area, listing types of properties, sanitary services (if any), water supply, number of families/persons involved, and priorities for housing.

A 10% population survey, covering housing units 1 to 11 was carried out in the latter part of the year in order to assess the current position.

Public Amenities

Two community halls were provided by religious bodies, in Road 224, and the corner of Roads 602/336.

Phoenix

Housing Development

Steady progress has been made with the construction of dwellings in this new Indian township in the northern part of the City. At the end of the year under review, 1 101 housing units were completed, including



Demolition in progress "Tin Town" Springfield.

the 500 units constructed at Clayfield to accommodate displaced "Tin Town" flood victims. At this stage it is estimated that the population is in the vicinity of 7 000 persons, which is less than 5% of the planned population.

In May the City Engineer's Department drew up plans which were subsequently approved by the Department of Community Development for the conversion of a dwelling unit into two separate shops to meet a desperate need. However, the provision of purpose-designed shops at strategic points is urgently required and should preferably be provided simultaneously with housing development.

New Farm

The provision of a safe potable water supply is of primary importance in the recently incorporated Newfarm area where all domestic water has to be hauled from a dam situated on a sugar estate, being filled directly from the Umgeni River, or a furrow situated on the eastern perimeter of the settlement being a natural water course. Weekly sampling for bacteriology revealed that both of these sources are contaminated with faecal coli organisms. During an on-site inspection in May, the Minister of Indian Affairs stated that the provision of a safe water supply was a matter of extreme urgency. The provision of such a facility is now under way. Two large storage tanks have been erected at Phoenix and water is to be pumped to Newfarm and distributed by means of a ring main and 14 communal standpipes. This scheme is expected to be fully operational by early 1977 and is considered adequate until the area is developed in approximately three years' time.

Pig Keeping

In the earlier part of the year, the licensee of the local butchery was found to have 18 pigs in a sty situated in the yard area. These were removed following departmental action.

Kwa Mashu

The following represents a very brief summary of the activities of the two African health inspectors and ancillary personnel employed in this large African dormitory suburb, with an estimated population of 145 000, under the part-time supervision of a Senior Health Inspector in charge of the Northern Zone.

Food Handling

Throughout the year, constant attention was given to maintaining a satisfactory standard of hygiene in food

handling premises. This programme has proved successful and, with few exceptions, the cafes, restaurants and other food handling establishments are considered to be on a par with those situated in other parts of the City. There has of necessity been the occasion where legal action had to be instituted as a final resort but, generally, the co-operation of the store owners has been excellent. The Port Natal Bantu Affairs Administration Board (P.N.B.A.A.B.) are responsible for the maintenance of buildings in which these trades are conducted. Whilst repairs are invariably effected, there is generally some delay in finalising matters. There were two prosecutions which were satisfactorily resolved.

Licences

A number of applications were dealt with during the year. The majority concerned general dealers, hawkers and restaurants.

Crèches

Two new child welfare places of care were completed during the year. The Zamokuhle Women's Welfare Society and the Kwa Mashu Child Welfare and Family Organisation are to take occupation.

Water Supplies

Numerous burst and leaking water mains continued to plague the authorities. Temporary water supplies were made available where entire units were deprived of water whilst repairs were effected.

Floods

Following a stream, which passes Unit F becoming obstructed with refuse breaking its banks during heavy rain, a number of dwellings were flooded. However, no structural damage occurred and the stream was subsequently cleared. Regular checks were made to prevent a recurrence.

Anti-Rodent Measures

Regular anti-rodent measures were maintained in the township throughout the year.

Refuse Removal

Despite a bi-weekly removal service, the illegal dumping of refuse on footpaths, road verges and vacant land continues to be a major problem. The method utilised, that of placing 200l drums on the verge, tends to aggravate the position as they are open to abuse by children, vagrants and dogs. In some instances residents have been seen placing refuse next to the drums. The Cleansing Section of the City Engineer's Department have stated on numerous occasions that they are experiencing difficulty in coping with the amount of refuse being generated but at this stage no alternative or improved method is apparently contemplated.

Dwellings

The maintenance branch of the P.N.B.A.A.B. continues to effect repairs to dwellings. The most common defects are cracked walls, leaking taps, defective cisterns and broken water closet pans. Generally, the structural condition of the dwellings is considered reasonable. Regular house-to-house calls are carried out by this department to ensure that a fair standard of cleanliness is maintained. The illegal keeping of animals and poultry is also closely watched.

Illegal Trading

Several instances of unlicensed vending were noted during the year and where a public health nuisance was in evidence, referred to the Licensing Officer for attention.

Conventions

Three Church gatherings were held during the year when a total of 2 300 persons attended. Toilet and refuse removal services were laid on beforehand and no public health nuisance occurred.

Cemetery Services

Although the cemetery has been in use at Kwa Mashu since 1972, water was only made available this year. The construction of a new building to house the office block, ablution facilities and congregation room is now in hand.

At the year end there were 3 264 adult and 6 989 children's graves in this cemetery.

Swimming Pool

Water samples to determine available chlorine levels were taken regularly throughout the year.

BUILDING CONTROL

Building Applications

During the period under review building plan applications totalling 5 306 (5 098), having an estimated value in excess of R88 million (R92 million) were received from the City Engineer for scrutiny from a public health view point and of these, 1 776 (1 751) sets of plans necessitated the submission of a qualified report. In addition a further 539 (443) drawings were returned to this office for clearance or further report. Thus a

total of 5 845 (5 541) plans required scrutiny.

Particulars in respect of these plans, excluding housing development which is reflected elsewhere, were as follows:-

Accommodation	Plans	Estimated Cost (Rm)
(1) <u>New Construction</u>		
Commercial and Industrial	68	13,8
State and Municipal	7	1,3
Other	21	1,4
(2) <u>Additions and Alterations</u>		
Non-residential	1 084	22,1
State and Municipal	25	1,4
Total	1 205	40,0

Artificial Lighting and Ventilation

In terms of Section 127 of the Building Bylaws the City Engineer may consent to the relaxing of certain standards of natural ventilation and lighting laid down in Sections 126 and 129 thereof, but before doing so, requests comment on the public health implications. These applications, which were usually related to large prestige developments, were fully motivated by the applicants or their advisers but never the less required careful study and often joint consultation with the parties concerned to ensure the incorporation of certain safeguards.

During 1976 a total of 25 (35) such applications were received and in all instances their acceptance was recommended to the City Engineer.

The above applications were in respect of uses such as shop/office complexes, cinemas, photographic dark rooms, lecture theatre, operating theatre and sports hall where natural ventilation or lighting were difficult to obtain or undesirable.

Sectional Title

Sixteen applications for local authority approval of a sectional title register were referred for departmental comment by the City Engineer and were in respect of maisonettes, duplexes and flats. These applications were approved but in some cases were subject to qualification or minor requirements.

Building Bylaws Liaison Committee

This department's representation on the Departmental Committee continued and subjects dealt with during the year included the following:-

- (1) continued examination of Chapter 14 of the Standard Building Regulations with a view to recommending the incorporation of these fire precautions;
- (2) full height internal partitions;
- (3) Continental-type seating in cinemas;
- (4) control of warehouses;
- (5) camping in caravan parks;
- (6) wall linings;
- (7) enclosure of balconies; and
- (8) wall-hung urinals.

Symposia and Seminars

Members of the department attended two seminars during 1976; one entitled "Safety Glazing" which dealt with the advantages of toughened and laminated as against normal sheet or plate glass. The second seminar dealt with "Housing: Emphasis on Low Cost" which outlined modern trends in housing overseas.

PEST CONTROL

The Field Hygiene section, which is responsible for the control of pests of mainly medical importance, enjoyed a full complement of supervisory and labour staff during the year.

(i) Mosquitoes

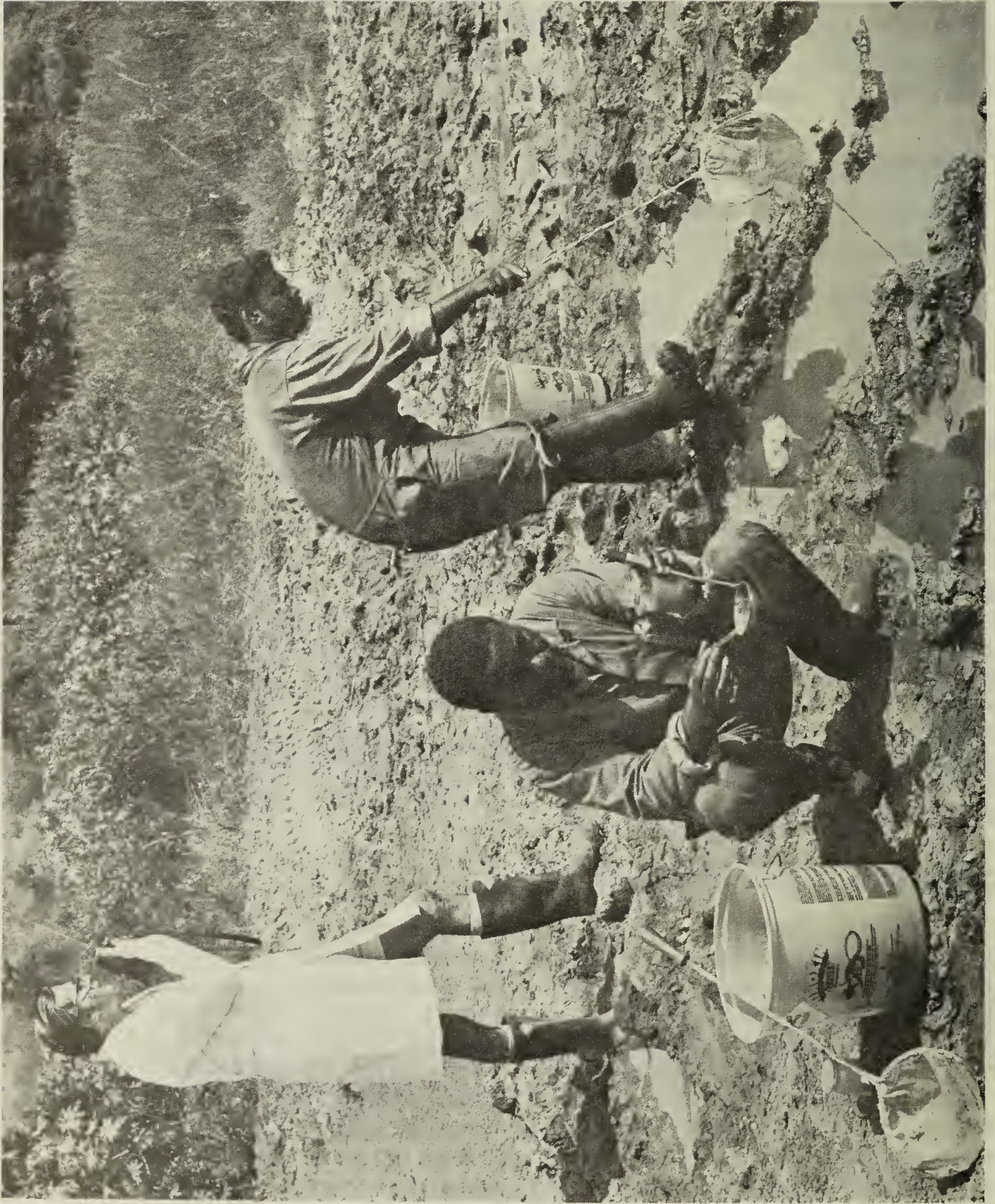
A total of 825 complaints were received and investigated during the year and an analysis of breeding foci is shown hereunder:-

Miscellaneous containers	486 (490)
Storm water drains	31 (68)
Other drains and sub-floor areas	22 (37)
Defective septic tanks and soak pits	50 (20)
Building under construction and demolition	64 (123)
Natural swamps and streams	22 (17)
Sanitary fitments	21 (34)
Undetermined	82 (101)
Unsubstantiated	47 (83)
	<hr/>
	825 (973)
	<hr/>

Heavy rains and flooding experienced during the early part of the year resulted in abnormal conditions favouring mosquito development especially in low-lying areas adjacent to streams and rivers which had overflowed their banks. However, all development was treated with larvicide before any serious nuisances arose. The level of the Happy Valley lake rose to such an extent that water encroached into the grass at the edges, thus stopping fish from feeding on mosquito larvae harbouring and developing therein. As an interim measure the trouble spots were sprayed with a selective larvicide harmless to fish life. Thereafter the verges were cleared of vegetation to enable fish to regain access as a long term biological control measure.

Anti-malaria Precautions

For over 30 years not one *Anopheles gambiae*, which specie of mosquito is the common vector of epidemic malaria, has been located and identified in the Durban area, despite the constant search for and collection of anopheline larvae by the department's 13 trained "spotters". This happy situation, however, came to an end in March when a larva found in a northern suburb of the City was identified as being of the *A. gambiae* species. The finding was viewed in a very serious light and precautionary measures were immediately implemented. Streams and pools throughout the area where the finding took place were treated with larvicides and "spotter" activity was intensified. Adult mosquitoes were collected from homes in the vicinity for identification, but none of the offending type were found.



Spotters collecting mosquito larvae for identification.

In April, however, seven more *A. gambiae* larvae were discovered; in May, 50; and in June, four, all in the northern parts of the City. Furthermore, during these same months eight larvae of the *A. funestus* species were identified. This specie is also a potential malaria vector and was last found in the City in 1974.

Anti-mosquito activity was intensified further and included drainage, ditching of streams and other water courses as well as treatment with larvicide. Mosquito surveys were increased, and spraying of dwellings, and other institutions in the district against adult mosquitoes was carried out.

This campaign appeared to be successful as no further evidence of either *A. gambiae* or *A. funestus* was found during the months July to November.

In early December, however, nine more *A. gambiae* were located in the same part of the City. Anti-mosquito measures were again intensified but no further larvae came to light. Constant vigilance is being maintained especially in the north western suburbs and anti-malarial work continues.

A total of 39 543 anopheline larvae were collected by the team of spotters and submitted to the department's laboratory for identification. The following is a survey of the findings:-

<i>gambiae</i>	71	(Nil)
<i>funestus</i>	8	(Nil)
<i>leesoni</i>	573	(1 334)
<i>ardensis</i>	23	(Nil)
<i>cinerosus</i>	639	(4)
<i>coustani</i>	18 190	(20 831)
<i>cyddipis</i>	761	(Nil)
<i>de meilloni</i>	18 650	(26 754)
<i>maculipalpis</i>	41	(1)
<i>marshalli</i>	136	(73)
<i>natalensis</i>	302	(37)
<i>pretoriensis</i>	61	(3)
<i>squamosus</i>	88	(Nil)

With a view to obtaining indisputable confirmation of specie identification, certain specimens were referred to the State laboratories at Tzaneen where the findings of the department's technician were endorsed. This official also paid a two week visit to the Anneck Institute where valuable experience was gained.

Biological Control

The continued use of Tilapia fish in ponds and swamps for the control of mosquito larvae still proves to be the most effective method and is employed wherever possible.

(ii) Flies

The number of complaints received and investigated, and sources of nuisance, were as follows:-

Refuse on vacant land	28	(90)
Compost heaps	36	(73)
Refuse bins	9	(12)
Poultry keeping	28	(32)
Manure/stables	4	(9)
Miscellaneous conditions	56	(76)
Undetermined	3	(3)
Unsubstantiated	12	(17)
	<hr/> 176	<hr/> (312)

In spite of large quantities of refuse from a Municipal compost site situated on the banks of the Umgeni River being washed away and deposited over a large area during the March floods, no serious outbreaks of fly breeding occurred.

Fly nuisances were again mainly caused by illegal dumping of decomposing waste matter on road verges and vacant land. Fortunately early discovery of these malpractices and expeditious introduction of anti-fly measures prevented any serious fly problem.

(iii) Rodents

During the year 491 complaints were investigated and appropriate action taken. Blood anti-coagulant poisons continued to be used with satisfactory results.

Particular attention was paid to control in the harbour and contiguous areas by poisoning, trapping and ensuring effective rodent proofing of industrial premises. For the purpose of plague indexing, 37 rodent carcasses were submitted to the State Health Department's laboratory, all with negative results.

Anti-rodent measures involving gassing and poisoning were also undertaken wherever rodent infestation was located, throughout the City on Municipal property. A total of 1 580 kg of anti-coagulant poison was used by the department on these activities.

(iv) Bedbugs

The control of these pests continued to be very successful with the use of 0,5% diazinon wet spray. The department's assignment is concerned mainly with cimex control in African hostels and in certain housing schemes.

(v) Cockroaches

Anti-roach measures were implemented in Municipal institutions, sewers and stormwater drains. In this regard a 1% diazinon spray was used with success.

(vi) Miscellaneous Pests

Enquiries are often received from the public seeking assistance in the eradication of pests such as ticks, spiders, bird, book and body lice, borers, termites, etc. Advice is given where possible, and complainants are urged to employ licensed pest control operators in most instances.

Bush Clearing

The department undertakes the clearance of overgrowth from private and certain State/Municipal-owned properties on a tariff basis. In this regard a total of 3 035 178 m² of land was cleared during the year.

Pest Control Operators

It is necessary for any person applying for the relevant trading licence to undergo an examination in the department on the proper use of insecticides, the dangers of their misuse, and action to be taken in the event of accidents involving pesticidal poisoning.

During the year 13 persons took this examination and seven were successful.

Student Lectures

Demonstrations and lectures were given to medical and pharmaceutical students on matters relating to pest control and the use and dangers of pesticides.

IX. MILK SUPPLIES

FRESH MILK PRODUCTION

The bulk of the farms registered to supply milk to Durban are situated in the Natal midlands (Pietermaritzburg and Mooi River areas), southern Natal (Ixopo and Underberg areas) and in East Griqualand, with the remainder in the Greytown, Estcourt and Ladysmith districts.

The year was not without its difficulties for dairying and the extremely heavy rainfall during the latter part of summer over the whole of the milkshed, while being of longterm benefit, constituted a stress factor at the time and made the production of winter feed a major problem. A shortage of registered milk was experienced during April and it was necessary to permit the introduction of 766 000 litres of milk from unregistered sources to make up the shortfall. This milk was used entirely for the production of sterilised milk.

In June the on-farm price of fresh milk was raised from 15,658 cents to 17,158 cents per litre and this stimulus was largely responsible for the substantial increase in production by registered producers (see statistics below).

At the end of 1976 there were 419 producers registered with the department (423 in 1975) to supply milk to Durban. This indicates a slowing of the trend over recent years of a diminishing number of fresh milk producers and is probably attributable to the good price now paid for the product.

Approximately 90% of the milk arriving at the pasteurisation and bottling depots does so by road tanker either from the six up-country bulking depots or directly from farms. The balance of the factory intake arrives in cans by road transport. The use of cans, either for the removal of milk from farms to bulking depots or from farms directly to a processing dairy, continues to be phased out gradually. This is illustrated by the fact that at the end of 1976 56% of producers' farms were equipped with bulk refrigerated storage tanks for milk compared with 46% in 1975 and 37% in 1974.

Mechanical milking is used by 90% of producers (86% at the end of 1975). The dairy inspectors provided a service to producers carrying out functional tests of 111 milking machine plants during the year. Fourteen found to be faulty in some respect.

The Veterinary Medical Officer visited 65 farms in the production areas to advise and stimulate producers who were experiencing problems of subclinical and clinical

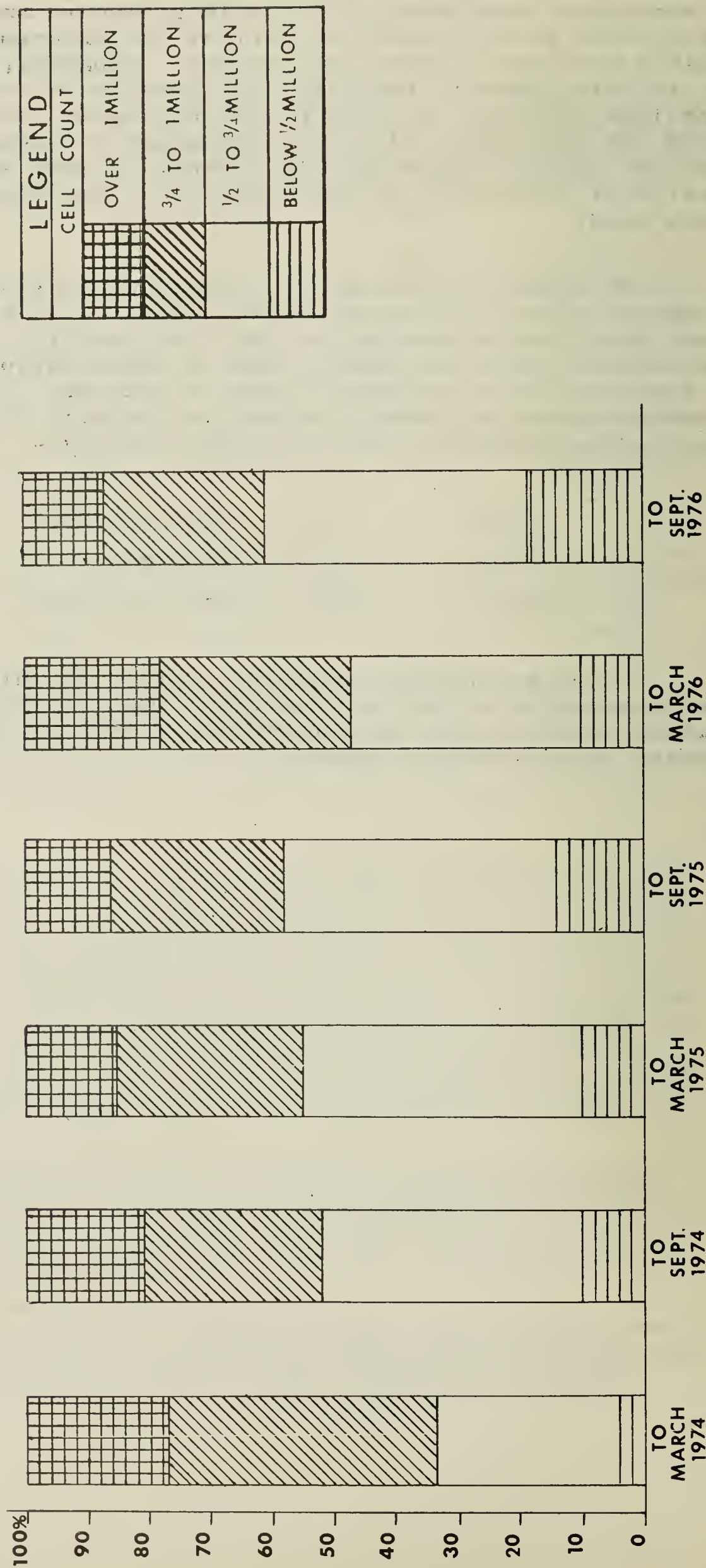
mastitis in their herds some of whom appeared to be taking no action in this regard. The Veterinary Medical Officer also addressed seven meetings of milk producers and three of veterinary practitioners as part of the programme to stimulate interest in mastitis control. Progress, although slow, is being made in reducing this problem to reasonable proportions and this is shown by the histogram overleaf showing the bulk milk cell count groupings of registered producers' herds. The milk cell content is used as an indicator of the extent of the subclinical mastitis problem in each herd.

Of great concern is the tremendous increase in the number of herds affected by brucellosis. It had been thought that the increasing incidence of positive agglutination tests was largely due to innoculation titres but this could be discounted in most instances. The increasing number of herds positive to the milk ring test is amply demonstrated by the following figures:-

1970	7,0%	herds positive
1973	12,2%	herds positive
1976	18,5%	herds positive

Being a scheduled disease, control of this condition is the responsibility of the State Veterinary Services, but where possible the Veterinary Medical Officer has assisted producers in an advisory capacity.

SUBCLINICAL MASTITIS – PERCENTAGE OF HERDS FALLING INTO FOUR SOMATIC CELL COUNT GROUPINGS DURING SUCCEEDING SIX – MONTH PERIODS



STATISTICS OF DURBAN'S MILK SUPPLY

	<u>1976</u>	<u>1975</u>
A. <u>Raw Milk Production and Intake</u>		
Number of registered producers at year end	419	423
Mean daily production of fresh milk	401 000 ℓ	367 000 ℓ
Mean daily raw milk intake by four factories (1975 three factories only existed)	300 000 ℓ	287 000 ℓ
Industrial milk introduced	766 500 ℓ	975 000 ℓ
B. <u>Heat-Treated Milk and Milk Products</u>		
(N.B. 1976 figures are in respect of four dairy factories, 1975 figures in respect of the three factories).		
(a) <u>Pasteurised Milk</u>		
(i) Mean daily production	213 000 ℓ	214 500 ℓ
(ii) Percentage sold in:-		
(a) Glass bottles	18,5%	43%
(b) Plastic bottles	35,5%	45,5%
(c) Board containers	39,5%	2,5%
(d) Cans	6,5%	9,0%
(b) <u>Sterilised Milk</u>		
Mean daily production	36 300 ℓ	35 600 ℓ
(c) <u>Ice-cream, Sorbet and Iced Milk Confections</u>		
Estimated mean daily consumption	16 000 ℓ	16 000 ℓ
(d) <u>Cream, Skim, Low-Fat Milk and Cultured Products</u>		
Mean daily production	38 000 ℓ	29 400 ℓ
(e)* <u>U.H.T. Pasteurised Milk and Milk Products</u>		
(i) Volume of locally produced U.H.T. whole milk sold within borough	19 830 ℓ	-
(ii) Volume of introduced U.H.T. whole milk sold within borough	739 300 ℓ	230 000 ℓ
(iii) Volume of introduced U.H.T. milk products sold within borough	381 300 ℓ	120 000 ℓ

* Ultra-high Temperature

HEAT-TREATED MILK AND MILK PRODUCTS

During the year a dairy factory situated at Thornville Junction, some 90 kilometres from Durban, was registered with this department and commenced the distribution of pasteurised milk and a limited range of milk products within the borough. Factory intake and production figures mentioned are therefore in respect of four dairy plants and not three as in previous years.

Another development on the local dairying scene was the installation of South Africa's fourth Ultra-high Temperature (U.H.T.) pasteurisation and aseptic filling plant at a local dairy.

The total production of milk and milk products (excluding frozen products) by the four dairies during the year amounted to some 105 million litres of which some 61,6 million litres or 58% was sold within the borough. Besides the four pasteurisation plants serving the City heat-treated milk and milk products were imported from other centres. Ice-cream and other frozen products were introduced from two Transvaal factories while U.H.T. pasteurised products were brought in from dairies situated in Johannesburg and Port Elizabeth.

The whole of the milk intake of the four dairies supplying Durban is heat-treated by one or other method of pasteurisation or by in-bottle sterilisation. Available figures would indicate that there has been a decrease in the amount of pasteurised milk consumed in the City, possibly due in part to consumer resistance to the higher price and also to increasing sales of "long-life" (U.H.T. pasteurised) milk. Sterilised milk production has remained constant but there has been a pronounced increase in sales of other dairy products such as cream, skim, low-fat milk and cultured products such as yoghurt, maas and soft cheese.

Statistics also show a continued and marked trend away from glass-bottled and can milk, both of which seem destined to be phased out altogether. The volume of milk filled into plastic bottles also diminished sharply while the use of board containers, especially 'Tetrabrik' cartons showed a tremendous increase. The swing away from returnable containers, that have to be sanitized before being refilled is welcomed by this department in favour of "one-way" containers.

Surveillance of the hygienic standards of dairy factories and suburban distribution depots was constantly maintained. All factory personnel involved in processing and bottling are Vi-tested and immunised against typhoid fever and each dairy keeps a medical record of these employees.

INSPECTIONS, SAMPLING AND LABORATORY CONTROL

Inspectional staff consisted of one Senior Dairy Inspector and three Dairy Inspectors who are responsible for the maintenance of structural and hygienic standards of farm dairy premises and milking equipment. This entails regular visits to producers' farms. The staff also keep an eye on the hygienic standards of bulking depots and milk transporters. In addition they are responsible for the regular sampling of can suppliers' milk at bulking depots and of some bulk suppliers' milk on the farms, although many samples from farm bulk tanks are taken for the department by a distributing company.

The following inspections were carried out by the dairy inspection staff during the year:

(i) City dairy premises	964	(727)
(ii) Country bulking depots	322	(313)
(iii) Farm dairy premises	1 717	(1 720) .

An endeavour was made to sample the bulk milk of each registered producer 10 to 12 times per annum. At the time of sampling the inspectors carry out sediment, resazurin and temperature testing of each supplier's milk. Samples are then conveyed under refrigeration to the departmental laboratory for further examination. Samples of bulk milk taken from road tankers on arrival in Durban are also regularly checked. The testing of the bacteriological quality of farm waters and of swabs of dairy equipment is also carried out in order to aid in the production of clean milk.

A comprehensive sampling and testing programme involving all fresh milk and milk products on sale in the City is followed to ensure that bylaw standards of cleanliness and safety are achieved. Frozen milk products sold by restaurants and tearooms are included in the sampling and testing programme so that the hygiene of serving and storing of these products can be monitored. Special attention is devoted to those retailers showing a poor bacteriological record.

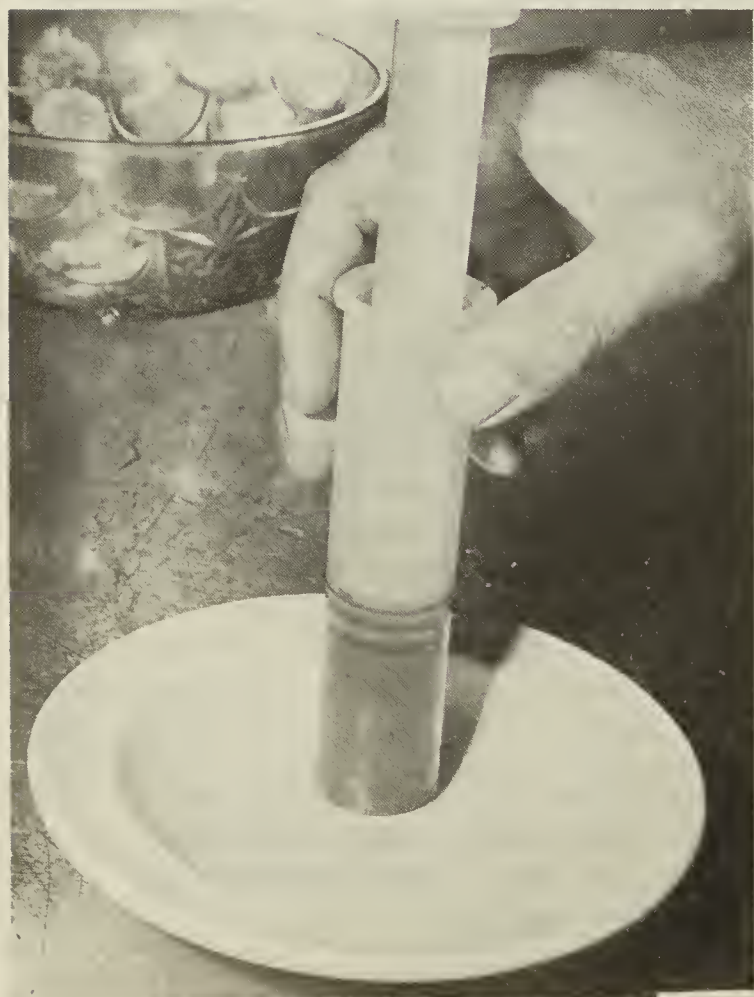
The departmental laboratory is staffed by a medical technologist and a woman laboratory assistant who are responsible for the bacteriological and physical testing of milk and milk products, waters, prepared foods, etc. They also control the "reading" of the results of impression cultures made by the health inspectorate staff in food shops, kitchens, etc., using the "Agar sausage" technique. (See photographs).

GENERAL

Numbers of students following disciplines such as medicine, veterinary science, nursing, pharmacy and health inspection have from time to time visited the laboratory to learn aspects of veterinary public health work.



(i) The complete "kit" for making an Agar "sausage" impression: on culture survey.



(ii) Making an impression culture.



(iii) Removing a slice of Agar for transfer to a sterile petri dish.

STATISTICS OF SAMPLES TAKEN AND TESTS PERFORMEDI. SAMPLES

- (a) Samples taken under the Foodstuffs, Cosmetics and Disinfectants Act and sent to State Chemical Laboratory:-

(i)	Milk	45	(62)
(ii)	Cream	19	(12)
(iii)	Ice-Cream	12	(13)

- (b) Samples submitted to consultant City Pathologist for bacteriological examination:-

Milk and milk products	41	(4)
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- (c) Samples submitted to State Health Laboratory for biological testing for tuberculosis:-

Raw milk	1	(1)
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- (d) Samples submitted to departmental laboratory:-

Raw bulked milk	5 570	(5 254)
Pasteurised milk	1 606	(1 550)
Pasteurised cream	168	(195)
Cultured milk products	652	(396)
Ice-cream, soft serve, iced confections	1 186	(1 294)
Separated and low-fat milk	102	(108)
Swabs, rinses and "Agar sausage" slices	381	(516)
U.H.T. pasteurised products	66	(551)
Milk and milk shakes (retail outlets)	84	(198)
Prepared foods	249	(31)
Waters and effluents	363	(310)
Miscellaneous	118	(38)

II. TESTS PERFORMED IN DEPARTMENTAL LABORATORY

- (a) Milk and Milk Products:

Coliform counts	3 800	(3 746)
Eijkmann tests	8 718	(8 891)
Thermotolerant organism counts	5 010	(5 234)
Methylene blue reduction tests	1 798	(1 499)
Resazurin reduction tests	4 050	(4 428)
Phosphatase tests (A & M)	3 062	(3 112)
Brucellosis (stained antigen ring test)	2 035	(1 419)

Mastitis (electronic somatic cell count)	3 896	(4 800)
Inhibitory substances (T.T.C. method)	5 234	(5 390)
Flavour, sterility and stability	238	(1 228)
Sediment tests	2 008	(2 593)

(b) Prepared foods:-

Eijkmann tests; staphylococci, enterobacteria and clostridia cultures	249	(31)
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(c) Water and effluent samples:-

Membrane filtration (coliform and E.coli I)	363	(310)
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(d) Miscellaneous Samples

Fresh seafoods, swabs, rinses, impression cultures, surveys of foodstuffs etc.	499	(541)
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III. RESULTS OF TESTS ON FARM PRODUCER MILKS

Test	Number of Samples		Percentage Satisfactory	
Resazurin (one hour)	4 050	(4 373)	91%	(91%)
Sediment (Visible dirt)	2 008	(2 593)	90%	(93%)
Inhibitory substances	4 094	(4 248)	95%	(93%)
Thermoturic count	4 189	(4 404)	83%	(84%)
Mastitis (somatic cell count)	3 488	(4 621)	80%	(81%)
Brucellosis (ring test)	2 035	(1 419)	80%	(82%)
Eijkmann using 0,01 ml	4 077	(4 396)	88%	(93%)

Note: The standards used in interpreting the above tests were

- (i) One hour resazurin test - fail if disc reading below $3\frac{1}{2}$
- (ii) Thermoturic organisms - $\geq 50\ 000$ per ml: unsatisfactory
- (iii) Somatic cell count - $\geq 10^6$ cells per ml: unsatisfactory

IV. RESULTS OF TESTS ON ROUTINE SAMPLES OF HEAT-TREATED MILK AND MILK PRODUCTS

		Test and Percentage Satisfactory			
	Number of Samples	Methylene Blue Reduction	Phosphatase	Coliform Count	Eijkmann Test
<u>A. Pasteurised Milk</u>					
(i) Glass Bottled	477 (571)	84,8% (79)	100% (100)	92,7% (91)	98,7% (99,7)
(ii) Plastic Bottles	670 (608)	94,1% (94)	100% (100)	91,5% (96)	99,6% (99,8)
(iii) Board Containers	174 (-)	92,5% (-)	100% (-)	92,5% (-)	99,4% (-)
(iv) Cans	117 (220)	81,1% (91)	100% (100)	77,8% (88)	98,3% (100)
<u>B. Cream</u>	162 (176)	81,8% (82)	100% (100)	90,7% (97)	96,3% (97,7)
<u>C. Frozen Milk Products</u>					
(i) Factory Ice cream	313 (328)		100% (100)	91,7% (94,5)	99,0% (100)
(ii) Retail Ice cream	163 (252)		100% (100)	63,8% (80)	99,4% (100)
(iii) Soft Dairy Mix	474 (514)		100% (100)	66,0% (71)	97,0% (99)
(iv) Iced Confections	202 (200)		100% (100)	91,6% (96,5)	99,5% (100)
<u>D. Separated and Low Fat Milk</u>	94 (105)	67,0% (76)	100% (100)	68,1% (74)	94,7% (98)
<u>E. Cultured Products</u>	469 (368)		100% (100)	91,3% (90)	96,2% (98)

X. PROSECUTIONS

The Health Inspectorate was active in the institution of legal proceedings for contraventions of the various legal codes administered by the department when other measures proved ineffective or when serious inadequacies were found.

The City Police Department continued to process public health cases and prosecute the same when defended in the Durban Magistrate's Courts, but regrettably the outcome was not so successful in those prosecutions which fell under the jurisdiction of the Pinetown magistracy of which the Chatsworth branch court is a subsidiary.

During the year 229 prosecutions were concluded, of which the majority (121) were "summary admission of guilt" cases. This system of written advice to accused persons of the intention to prosecute, and indicating that payment of the sum stated will avoid the necessity for summons to be served, continued to prove beneficial in reducing administrative procedures and expediting verdicts.

Of the 229 cases, 191 fell within the jurisdiction of the Durban magistracy, 36 were handled by the Chatsworth branch court and two by the Inanda Court at Verulam. The number of "counts" reflecting the actual sections of the law contravened totalled 262 and are summarised on the next page.

Contravention	Admitted Guilt (Counts)	Found Guilty (Counts)	Fines Paid	Remarks
<u>FOODSTUFFS, COSMETICS AND DIS- INFECTANTS ACT, 1972</u>			R	
Sausages: excess preservative	1		50	
Preservative in mince meat	3		170	
Boerewors: excess preservative	2		120	
Sub-standard salt	1		40	
Sub-standard boerewors	4		210	
Sub-standard sausages	1		50	
<u>PUBLIC HEALTH ACT, 1919</u>				
Contaminated food	11		425	1 Withdrawn
<u>UNSOUND FOOD REGULATION</u>				
Blown/rusted food tins	2		70	
<u>SLUMS ACT, 1934</u>				
Breach of Court Order	11		510	
		1	50	(or 25 days)
Illegal Occupation	1		60	
		1	50	(or 25 days)
<u>BUILDING BYLAWS</u>				
Sanitary accommo- dation absent (building workers')	3		110	
		2	70	(or 20 days)
<u>FOOD BYLAWS</u>				
Unclean conditions	16		875	
		5	160	(or 85 days)
Unclean vehicle	5		230	

Contravention	Admitted Guilt (Counts)	Found Guilty (Counts)	Fines Paid	Remarks
<u>FOOD BYLAWS</u> (cont.)			R	
Absence of overalls	4		150	
Absence of soap, towels, etc.	7	3	210 85	(or 72 days)
Food exposed to contamination	14	1	610 30	(or 30 days) 2 discharged
Food contaminated	6		280	
Apparel in food room	3		60	
Unrefrigerated food	1		60	
Unregistered vehicle	19		755	2 discharged
Absence of hot water		1	30	(or 30 days)
Dirty crockery/ utensils	3	1	110 30	(or 30 days)
Incompatible articles	3	1	90 30	(or 30 days)
Absence of lockers		1	30	
Unsuitable vehicle	3		90	
Improper premises	2		80	
Building in dis- repair	2	1	80 25	(or 13 days)
No toilet paper	1		20	
Rodent harbourage	1		30	
Sub-standard food	4		180	

Contravention	Admitted Guilt (Counts)	Found Guilty (Counts)	Fines Paid	Remarks
<u>GENERAL BYLAWS</u>			R	
Unauthorised dumping	28	2	455 65	(or 30 days) 3 withdrawn
Spillage of load	1		30	
<u>MILK (AND MILK PRODUCTS) BYLAWS</u>				
Contaminated milk	13		620	
Contaminated maas	1		60	
Contaminated cream	4		180	
Contaminated ice cream	9		410	
Incorrectly wrapped product	1		40	
<u>PUBLIC HEALTH BYLAWS</u>				
Unclean conditions	25	4	1 020 140	(or 70 days)
Absence of water supply	2	1	60 50	
Defective drainage	15	1	445 30	(or 30 days)
Fly breeding	4	2	120 50	(or 25 days)
Absence of sanitation	1		60	
Defective buildings	10		425	2 discharged
Swimming bath water	6		215	
Mosquito breeding	1		30	
Pig keeping		1	20	
Contaminated food	1		40	
Unauthorised dumping	1		5	
Unregistered vehicles	2		50	
Rodent harbourage	1	1	20 20	(or 10 days)
<u>DRY CLEANERS' BYLAWS</u>				
Unapproved vehicles	2		80	
	262	30	11 055	

XI. HEALTH EDUCATION

INTRODUCTION

It is generally acknowledged that health education is an integral and essential function of a community health service in that it has the crucial task of creating desirable health attitudes and behaviour, their nurture and maintenance. With this object in view lecturing staff structure their programmes, emphasising that this attitude can only be brought into existence where there is a self-motivated commitment to these aims by individuals and groups within a community.

There was a re-organisation of staff structure during the year with a concomittant enlargement from 22 to 31 members. Until this re-organisation was completed the section's activities were much curtailed. However, by December the full complement of staff had almost been fulfilled and during the course of this month an intensive orientation and training programme was instituted.

Activities for the year were as follows:-

DEPARTMENTAL AUDITORIUM

In January a multi-racial seminar on drug addiction was held in conjunction with the South African Police Vice Squad. Members of the South African Police and South African Defence Force, Municipal personnel, social workers and other interested persons attended and were indeed fortunate to hear Mr. M.C. Manby, Adviser to the United Nations on illegal drug traffic and control.

A seminar on a data bank system was held by the City Engineer's Department and attended by interested members of that and the City Health Department.

Throughout the year weekly in-service training sessions embracing paediatrics and psychiatry were attended by medical officers and nursing personnel. During these sessions films on mental and social aspects of health, epilepsy, phenylketonuria and child development were shown. Educational films covering subjects such as a housing project which stressed the need for community facilities and correct planning; mental stress; maturity and social adjustment; and venereal diseases were viewed by the health inspectorate, community health nurses and other staff.

Students of all community groups undergoing training for the Diploma in Community Health Nursing, student tutors, student nurses, pharmacy students, medical students and learner health inspectors attended lectures, film and slide shows on health education, preventive medicine and the functions of the City Health Department. In June a two week in-service



Mr. Benedict Ngwenya, a lecturer in this department, busy with a broadcast on health education. (By kind courtesy of Radio Bantu, South African Broadcasting Corporation, Durban).

training course was held for the family planning advisers of the City Health Department. City Health and City Engineer's staff viewed films on the "Effects of Noise"; "Living in the Sun"; "Preparing and Giving Instructions"; and the "Effect of Vibrating Rollers on Soil and Macadam." Lectures with films, arranged by the National Building Research Institute were also delivered to members and departmental staff. The topics covered were "Ventilation and Lighting in Buildings"; "Rivers"; "The Carlton Centre"; "The Building Institute"; and "Traffic Planning."

Members of the Institute of Water Pollution Control and interested members of the City Health and City Engineer's Departments visited the auditorium on four occasions for meetings and were shown a film on "Pollution of Rivers" on one.

A photographic display produced by the health education section, depicting child development, was presented in the auditorium foyer in conjunction with a meeting of community health nurses from all over Natal. This fine photographic study, seldom seen outside text books, attracted much comment and great interest from all those attending.

GENERAL

A most informative three day course on nutrition was conducted for the health education staff by a dietician from the Department of Health.

During the Health Week held in March at the Windermere Centre, the section exhibited a photographic display on Total Community Health Care. Pamphlets relating to this theme were available to the public. A film on family planning was screened whilst members of the staff gave talks on tuberculosis and mothercraft.

An invitation was received from the Valley Trust Centre at Botha's Hill to attend a lecture given by Miss Eleanor Ponsonby O.B.E. of Oxfam on health education techniques used in Malawi and other African states. Five members of the section attended which proved most informative and useful for staff training purposes.

WHITE COMMUNITY

A newly formed social club requested talks on health matters geared to their special needs. A talk on general diseases and a film on dental care given by the community health nurse were well received by their 75 members.

The community health nurse delivered a series of lectures to student nurses at St. Augustine's Hospital on "The Role of the Community Health Nurse"; "Epidemiology and Preventive Medicine"; and "Health Education".

A mother and baby week was held during the month of October at the Old Mutual Centre, Montclair. The photographic display on milestones in child development aroused much interest and lively discussion amongst the mothers attending. The community health nurse gave talks on "Pre- and postnatal care"; "Nutrition"; "Childhood Diseases and Immunization". Booklets and pamphlets on all aspects of mothercraft were made available to the public.

Following an outbreak of headlice at a sheltered employment centre for physically and mentally handicapped adults the community health nurse gave a talk and slide show on the treatment and prevention of the condition. There was an excellent response from the 300 employees and a follow-up visit revealed that the condition had been eliminated.

COLOURED COMMUNITY

Two posts for Coloured lecturers were filled in November but until then work amongst the Coloured community was carried out mainly by the White community health nurse. The Austerville Community Pilot Project continued with the clinic as a focal point. At present a vegetable garden flourishes there and making use of produce obtained, demonstrations of the correct preparation and cooking of vegetables were most valuable in emphasising the importance of nutrition. The residents of the area were encouraged to cultivate their own vegetable gardens, the aim being to improve nutrition and at the same time reduce the cost of living. A women's group, formed in the initial stages of the project has, under the guidance of the community health nurse, been of great assistance in promoting health education in the Pirie Road area and also at the Wentworth Place of Safety.

A Coloured homemakers course on nutrition was held at the King George V Hospital. The community health nurse attended and assisted during question time. During the July school holidays talks were given to teenage girls on "Growing Up" and were well attended with much spirited discussion.

At the request of the organisers of the "Spectacular '76" exhibition which was held at the Bechet College, Mayville, this section equipped and manned a stall with the theme "The Home as a Health Centre". Talks on different aspects of health concerning home and family life were interspersed and re-inforced with film shows. The subjects covered were nutrition, hygiene, transmission of disease and family planning.

A summary of the work is as follows:-

Method Used	No. of Sessions	Subjects	Venues
Film/ slide shows	39	Nutrition; budgeting; hygiene; transmission of disease; dental care; scabies; smoking; drug abuse; adolescence; first aid; food hygiene	Family health clinics, schools, Church groups, Place of Safety

The total attendances at the above sessions was 1 113.

INDIAN COMMUNITY

Following widespread devastation in the wake of the March floods, many families were temporarily accommodated in tents on a sports field. In view of conditions prevailing in "Tent Town", lecturing staff of the health education section were actively engaged in giving talks on hygiene and safety to the occupants. This section assisted in marshalling the crowds and broadcasting information to the community during the mass typhoid immunisation campaign following the floods.

A photographic record was produced illustrating the extensive damage caused by the floods and showing the relevant precautionary measures taken to prevent the outbreak of serious disease.

In order to ensure that the residents fully utilise facilities provided in the new Phoenix Township a lecturer was assigned to the area where he continued educational programmes which had been initiated in the Springfield Flats area and "Tent Town". Health education programmes continue, however, not only in organised townships but in the remaining shack areas throughout Durban.

During the Chatsworth Education Exhibition in July, display material and audio-visual aids designed and constructed by this section were used in the family planning stall. Members of the health education staff assisted with film shows.

A summary of the year's work is as follows:-

Method Used	No. of Sessions	Subjects	Venues
Film/ slide shows	482	Nutrition; budgeting; hygiene; transmission of disease; food handling; child care; family planning; tuberculosis; the head louse; scabies; adolescence; immunisation; vegetable gardening; bilharzia; alcohol; drug abuse.	Family health clinics; schools; food handlers; factory employees; hospital out-patients; women's groups; Church groups.

Total attendance at the above sessions was 41 546.

AFRICAN COMMUNITY

Health education was enthusiastically received by members of this community, and a variety of presentation methods was used. The lecturing staff are well known by the community, particularly in the townships and are always warmly accepted.

Close co-operation continued between the health education staff and various organisations such as the Child Welfare Society and the Home for the Aged in Lamontville.

The promotion of vegetable gardens continued in Lamontville and Chesterville. The demonstration garden at the Lamontville family health clinic proved most beneficial and produce from the garden was used for demonstrations on nutrition. Many residents have started their own gardens and were advised and encouraged by the lecturing staff. Unfortunately, due to lack of a suitable venue no demonstration garden in Chesterville was established.

In January and June staff members attended the African Homemakers Leadership course organised by the Federation of Women's Institutes, which was held at the King George V Hospital. The staff presented a play entitled "The Care of the Aged" which proved very successful and stimulated much discussion amongst the audience. In January the staff actively participated in a Youth Leadership Course conducted at Chesterville by the Bantu Welfare Society by contributing talks and film shows.

Health education staff assisted with the typhoid immunization campaign in Lamontville which was carried out in the wake of the floods, due to the poor water supply. Before the immunization team went to the township broadcasts were made from the loud-speaker van informing the residents of the immunization facilities to be offered. In addition a talk entitled "Floods as an Emergency" was given by an African lecturer on Radio Bantu. The medium of radio was also used during the poliomyelitis immunization campaign in July when a talk on the disease and its prevention was given. The lecturing staff helped to motivate the residents in the townships to have their children immunized.

A summary of the year's work is as follows:-

Method Used	No. of Sessions	Subjects	Venues
Film/ slide shows	529	Nutrition; budgeting; hygiene; transmission; of disease; food handling; child care; family planning; tuberculosis; adolescence; immunization; vegetable gardening; venereal diseases; mental health; home safety; alcoholism; drug abuse; first aid; scabies; typhoid fever.	Family health clinics; chest clinics; hospital out- patients; youth clubs; schools; children's homes; old age homes; women's groups; Church groups; factories; food handlers.
Talks and demon- stra- tions	298		

Total attendance at the above sessions was 40 868.

House to House Visits

These were made to members of all the communities and talks mainly on environmental hygiene and vegetable gardening were given, the total number of visits being 1 450.

XII. ALLIED HEALTH SERVICES

Certain ancillary public health services are undertaken by other authorities and the department is indebted for the following contributions by the City Engineer; Superintendent, Abattoir Corporation; and Director of Parks, Recreation and Beaches.

ENGINEERING SERVICES

(A) Water:

(i) Service Reservoirs:

Newlands Reservoirs Nos. 1 and 2, which will serve the Newlands Indian New Town, portion of the Newlands East Coloured Township and areas of Sea Cow Lake, were completed during the year. Additional storage has been provided for the Sherwood/Sydenham/Clare Estate Zone of supply with the completion of a further reservoir in the Sherwood area.

A start was made on the construction of the first 100 Ml compartment of Woodlands Reservoir No. 3, a 200 Ml reservoir which will provide additional storage for the industrial areas in the southern section of the City.

Further storage is being provided in the high level zone of the Umlazi Bantu Township by the provision of an extension to Umlazi Reservoir No. 2, the construction of which commenced in the latter half of the year.

Trunk Mains:

The installation of the large diameter outlet mains from the new Woodlands Reservoir No. 3 to the existing Mobeni Reservoir was commenced during the year.

The final section of the larger inlet main to Woodlands Reservoir Nos. 1 and 2 was completed.

The last section of the new inlet main to Reservoir No. 1 of the Umlazi Bantu Township was also completed during the year.

Reticulation:

Augmentation and extensions to the City's water distribution system have been undertaken to meet the demands for water in various parts of the City and the out-of-City area of Queensburgh.

(ii) Potable Water:

All raw water supplies were analysed and monitored regularly to ensure optimum chemical treatment at the purification works. Both bulk and domestic water supplies were tested regularly throughout the year at 60 sampling points distributed over the urban and peri-urban reticulation network. All analyses reveal both chemical and bacteriological quality to be well within the potable water criteria specified by the South African Bureau of Standards.

To ensure adequate free chlorine levels in the remote areas of the reticulation system four rechlorination installations were used to good effect.

A typical analysis of all surveys carried out during the year of both chemical and bacteriological quality is shown in the accompanying table.

(iii) Swimming Baths and Beaches:

All swimming baths under the control of the Department of Parks, Recreation and Beaches, numbering 19 in all, including once again the City Baths, were each visited regularly on 20 occasions. Both chemical and bacteriological quality of the water was assessed and remedial advice given as necessitated to ensure a consistent high standard.

(B) Public Cleansing Services:Refuse Removal:

An annual volume of 750 000 m³ of refuse was removed from domestic, trade, commercial and industrial premises. An average daily labour force of 430 labourers with 50 vehicles was used for this function. The use of plastic refuse bags was static with no new areas being placed on this scheme.

Refuse Disposal:

This was carried out by the sanitary land fill method at the Chatsworth and Springfield disposal sites using heavy mechanical plant for spreading and compaction purposes.

Night Soil Services:

About 6 000 premises are on this system which is decreasing as sewer reticulation progresses. This service is given with the use of some 110 labourers and 10 vehicles on Monday, Wednesday and Friday only.

CHEMICAL ANALYSES

	Durban Heights Outlet		Average	Northdene Outlet		Average	S.A.B.S. Spec. Limits
	1.2.76 to 31.7.76	1.8.76 to 31.1.77		1.2.76 to 31.7.76	1.8.76 to 31.1.77		
H^+ pH	7,4	7,4	7,4	7,3	7,4	7,4	6,0 - 9,0
H^+ pH	9,3	9,3	9,3	9,0	8,7	8,9	
Conductivity (ms/m)	9,1	9,6	9,4	25,7	32,6	29,1	
Colour	5	5	5	5	5	5	20
Turbidity (Sigrist Units) (1 unit) = 3,4 spec. units)	1,3		1,3	0,5	0,6	0,6	1,0
mg/litre Total Diss. Solids	66	69	68	152	220	186	500
Chloride	13	13	13	44	47	46	250
Iron	0,12	0,03	0,08	0,12	0,03	0,08	0,3
Silica	14	0,03	13	15	9	12	
Ammonia (N)	Nil	0,02	0,01	0,01	0,03	0,02	
Nitrate (N)	0,3	0,3	0,3	1,3	1,5	1,4	10
Permanganate Value	0,3	0,5	0,4	0,7	0,9	0,8	
Free CO_2	2,2	2,7	2,5	3,9	3,6	3,8	
Phosphate (PO_4)	0,04	0,06	0,05				
Hardness (as CaCO_3) Total	29	31	30	67	75	71	20 - 200
Calcium	14	15	15	43	37	40	
Non Carbonate	4	2	3	35	28	32	
Carbonate	24	29	27	32	47	40	
Sod. Alkalinity	Nil	Nil	Nil	Nil	Nil	Nil	
Total Alkalinity	24	29	27	32	47	40	
Bacterial Analysis Total viable Org.(per ml) Av.	1	Nil	1	47	3	25	100
Coliforms(per 100 ml)	Nil	Nil	Nil	Nil	Nil	Nil	Nil
E. Coli I. (per 100 ml)	Nil	Nil	Nil	Nil	Nil	Nil	Nil

Street Sweeping:

An annual volume of 81 000 m³ of litter was picked up and disposed of using a labour force of some 450 sweepers. Some 1 500 litter bins are used in the City and they are provided by the Council and by a private contractor.

Vacuum Tankers:

Conservancy tanks for 85 factories, schools, shopping areas and the like were serviced in addition to some 20 septic tanks each day with a force of 6 tankers and 20 labourers.

Sewer Blockage Crews:

Four mobile crews of five labourers each and two pedestrian gangs of 10 labourers each attended to some 50 calls per day in connection with blockages in sewer mains and private property. In addition this section also attended to routine cleaning and inspection of mains and chambers.

Mechanical Cleaning of Sewers:

Two crews of 10 labourers each attended to the major blockages in sewer mains and to the routine removal of grit, sand and fat deposited in the mains. Use was made of mechanical cleaners and high water pressure cleaners.

Stormwater Mains and Inlets:

Seven mobile crews of 14 labourers each attended to the clearing of blockages, the regular clearing of mains and inlets and the soak-away type of stormwater disposal. In addition, two crews with a total labour force of 60 labourers attended to major culverts of the open and closed type.

(C) Public Conveniences:

Existing: A total of 55 blocks for Non-Whites are in use.
A total of 34 blocks for Whites are in use.

Proposed: A new block for Non-Whites at Southampton Street.
A new block for Non-Whites at Francois/Sydney Roads.

(The above two blocks have been completed during the current calendar year and are in use. Their number is not included in the existing toilet figures above).

(D) Air Pollution:

All sources of air pollution, including industry, commerce, locomotives, shipping and road vehicles were monitored and controlled throughout the year. The limit on smoke emission from road vehicles was made more stringent. Smoke pollution from locomotives decreased considerably due to a change-over from steam to diesel locomotives. Air pollution monitoring was maintained at a satisfactory level. Durban operates a number of air pollution monitoring stations, which form part of the national survey on air pollution.

No significant changes on sulphur dioxide levels have been observed at these stations. However, a significant decrease in smoke pollution at the City Hall and Congella stations has occurred over the past five years. Public and professional interest was maintained in all aspects of pollution control.

During the year Council approved the extension of the smoke control zones to all residential and light industrial areas. This legislation is awaiting Government approval prior to promulgation.

(E) Progress with Sewerage Programme:Reticulation:

Contracts for the construction of sewerage reticulation at Brighton Beach, Puntans Hill and Reservoir Hills were completed during the year, while a contract was commenced in the Avoca area.

In addition, departmental work was carried out at Parkhill, Kolandene Heights, and in the Kinmount Avenue, Loon Road and Barnard Road areas.

Trunk Sewers:

Construction of the Woodlands Tunnel between Nottingham Road (Durban) and Yellowwood Park was completed and carries the Umhlatuzana Trunk Sewer and, upstream of the tunnel, the portion of this trunk sewer which traverses the Stainbank Nature Reserve was completed. The construction of three service bridges crossing the Umhlatuzana River was completed during the year, while work on a fourth service bridge was commenced.

The final stage of the construction of the trunk sewer in the Booth Road Valley was commenced during the year.

The third stage of the Umhlangane Trunk Sewer, extending to a point near Avoca Station, was completed.

Contracts for the construction of the trunk sewer to serve the Umlazi Glebe area south of the Umlaas Canal and the service bridge to carry this sewer across the Umlaas Canal were completed during the year.

At Reservoir Hills, the extension of the trunk sewers in the Umgutulu Valley was commenced.

Work on the installation of new pumping equipment at the Island View Sewage pumping station was concluded.

Waste Water Treatment Works:

At the Southern Works an additional centrifuge for sludge treatment was ordered. This should be operative towards the end of 1977 due to extended delivery periods for this type of equipment. Otherwise only modifications of a minor nature were found to be necessary.

No problems were experienced at the Central Works which continued to operate satisfactorily.

Civil and mechanical work in connection with sludge thickeners and degritters was completed, at the Northern Works. Commissioning is due to take place in March, 1977, after completion of ancillary departmental works.

At kwaMashu, for economical reasons, pending build-up of flows from Ntuzuma and Phoenix Housing Schemes, certain sections of the works were placed on a care and maintenance basis.

The Ocean Outfalls:

Settled effluent from the Central and Southern Works continued to be discharged through their respective ocean outfalls with conditions on Durban's beaches etc., remaining satisfactory.

Provision will be made to carry out the routine underwater surveys and cathodic protection tests during mid-1977.

Trade Effluents:

A satisfactory level of control was maintained throughout the year on the discharge of industrial effluents to ensure control of discharges to sewer or stormwater which could cause nuisance, pollution or upset the bacteriological processes at the Corporation's Waste Water Treatment Works. Special surveys of industrial effluents discharged from factories were made to eliminate high organic load and oil discharges. Non-White staff were upgraded by the creation of Pollution Control Assistants to replace stoker demonstrators and ungraded trade effluent assistants. The new

pollution control assistants, after suitable training, have facilitated and extended the general control on air and water pollution. Regular meetings were held with the main contributors of trade effluent such as refineries, paper mill, chemical industry etc., and this facilitated plant improvements and tighter control of industrial effluent disposal.

ABATTOIR SERVICES

With commissioning of the new major Abattoir at Cato Ridge being anticipated during 1979, no new major projects were undertaken at the Abattoir. The operator of the Abattoir, the S.A. Abattoir Corporation, has merely continued to ensure that all existing facilities are fully maintained in order that there be no possibility of an interruption in the supply of fresh meat to the City and surrounding districts.

The Abattoir continues to be the premises through which the receipt/distribution of all meat introduced from outside sources is conducted. Such meat is re-inspected by officials of the Department of Agricultural Technical Services and the following amounts were involved during the year under review:-

Beef carcasses	20 117
Other carcasses	32 276
Portions of meat	514 638 kg

As will be seen from the subjoined schedule, the throughput of meat from the Durban Abattoir was comparable with the previous year.

<u>Animal</u>	<u>Throughput</u>	<u>Condemned</u>	<u>Detained+</u>
Cattle	146 018 (121 704)	1 377 (1 496)	2 563 (2 518)
Calves	9 200 (8 555)	913 (1 101)	48 (58)
Sheep and goats	783 091 (744 338)	5 380 (5 062)	- -
Pigs	92 609 (102 973)	2 821 (3 434)	366 (519)

Condemned material amounted to 3 743 346 kg.

+ Passed conditional upon freezing (cysticercosis).

CEMETERY SERVICES(i) Public Cemeteries

Interments at the municipal cemeteries were as follows:-

<u>Cemetery</u>	<u>White</u>	<u>Coloured</u>	<u>African</u>	<u>Indian</u>
Stellawood	766	275	5	84
Red Hill	57	43	-	299
Umgeni	10	-	-	-
Hillary	16	1	16	4
General (West Street)	35	4	-	166
Mayville	-	3	334	63
Cavendish	-	-	-	450
Springfield	-	-	-	30
Sydenham	-	-	3	1
Merewent	-	-	-	23
	<u>884</u>	<u>326</u>	<u>358</u>	<u>1 120</u>

It is anticipated that the Red Hill Cemetery will ultimately take over from the Stellawood Cemetery as the major cemetery for the White community due to the decreasing availability of space thereat. The question of regionalisation of cemeteries in the Greater Durban Area is still under consideration.

As anticipated the development of the new cemetery at Austerville for the Coloured community commenced during the 1975/76 financial year.

The availability of sites for Indians has improved with the opening of the Merewent Cemetery to the public during early 1976. The development of the cemetery at Higginson Highway, Chatsworth, is nearing completion.

The regional cemetery at the Ntuzuma Bantu Township, which is under the control of the Port Natal Bantu Affairs Administration Board is the major recipient of deceased African persons.

(ii) Private Cemeteries

Returns are submitted monthly giving details of the interments carried out at the various burial places, the total being 889 for 1976.

(iii) Crematoria

There were 2 289 cremations of Whites at Stellawood Cemetery and 860 Indians at Cato Manor and Clare Estate.

(iv) Pauper Burials

Interments undertaken at the expense of the local authority at cemeteries in Durban were in respect of 13 Whites, 15 Coloureds and 179 Indians, the Africans' being undertaken outside Durban at the regional cemetery, at Ntumuzuma.

XIII. GENERALMEDICAL BUREAU

The activities of this section include:-

- (a) the pre-employment medical examination of all entrants into the municipal service. This includes African graded staff of this department;
- (b) a medical consultative service for certain members of the Fire, Police and Licensing Departments;
- (c) the convening of Medical Boards at the request of Departments;
- (d) scrutiny of all Injured on Duty certificates;
- (e) classification of all mortality statistics in terms of international coding;
- (f) Vi-testing clinics and certain clinical investigations;
- (g) investigations concerning cases of diseases in hospitals; and
- (h) departmental relief duties;
- (i) periodic house and hospital calls.

Medical examinations performed during the year are summarised in the following table:-

Service	White		Coloured		African		Indian		Total
	M	F	M	F	M	F	M	F	
Entrance Examinations	1 004	310	22	4	-	1	1 092	6	2 439
Consultations	566	-	-	-	1	-	-	-	567
Medical Boards	30	-	-	-	21	-	9	-	60
Injured on Duty	5	3	-	-	-	-	-	-	8

CONFERENCES

The City Medical Officer of Health attended a number of symposia, conferences, seminars or meetings during the year, in a semi-official capacity or as a representative of the department, the more important ones away from Durban being the Executive Committee meetings of the Preventive and Community Medicine Group of the Medical Association of South Africa held in Johannesburg; the International Conference on Air Pollution at the University of Pretoria in April; the International Conference on Mycobacterial Diseases at the University of Stellenbosch (with the Assistant Medical Officer of Health) in June; and the Management Board of the South African Association for Early Childhood Education in Johannesburg in July.

The Deputy City Medical Officer of Health (Dr. M.B. Richter) attended the second and third meetings of the Advisory Committee on the Animal Slaughter, Meat and Meat Products Hygiene Act, held in Pretoria on 1 June and 21 October respectively, as the representative of the United Municipal Executive and, on the latter trip, she also attended the Annual General Meeting in Johannesburg of the Preventive and Community Medicine Group of the Medical Association of South Africa.

In July, a visit was paid to the University of Zululand at Kwa Dhlangezwa, Kwa Zulu by the Senior Clinical Medical Officer (Special Clinic) to talk at a refresher course for nurses on "Venereal diseases with special reference to treatment". The Senior Clinical Medical Officer (Family Health) attended the workshop session in September in Johannesburg respecting "Health services for pre-school children with special reference to age groups 2 - 6 years" which was conducted under the auspices of the South African National Council for Child and Family Welfare.

In August the Veterinary Medical Officer conducted a visiting British authority on bovine mastitis to a series of meetings at Ixopo, Pietermaritzburg and Hilton arranged by the Natal Branch of the South African Veterinary Association. The department's Veterinarian also attended the Symposium of the Association held in Bloemfontein at the end of September.

Arising from the identification in Durban of *Anopheles gambiae*, the vector of malaria, arrangements were made for the Laboratory Assistant (Entomology) to proceed on a two week course on mosquito identification (larvae and adults) at the Annecke Institute, Tzaneen, Transvaal.

A number of conferences were held locally which were attended by various departmental representatives, and on several occasions visiting scientists from overseas and important visitors were interviewed or conducted on tours of inspection of local industries.

TRAINING

As in the past the department with the standing approval of the City Council provided facilities for the training of students in the various fields of preventive and promotive health.

During the year the following staff members were successful in examinations:-

National Diploma for Health Inspectors

R.A. Ayre, T.J. Drinkwater, K.P. McMaster,
A.S. Norrie, C.A. Powell and N.J.W. Silver.

Diploma in Psychiatric Nursing

Miss M.D. Bloem and Miss P. Dayanand.

NURSING AWARDS

With a view to encouraging nursing trainees at general hospitals in Durban the City Council makes certain awards and presents commemorative certificates to outstanding students each year, the recipients in 1976 being as follows:-

Addington (Provincial Hospital for Whites and Coloureds)

Diploma	:	Gold medal	-	Mrs. J. Minnie
	:	Silver medal	-	Mrs. D. Krause
Integrated	:	Gold medal	-	Miss C.E. Dreyer
Enrolled	:	Travel clock	-	Miss J. Witcher

King Edward VIII (Provincial Hospital mainly for Africans)

Diploma	:	Gold fob watch	-	Miss Duduzile M. Khozi
	:	Steel fob watch	-	Miss Nomajapan N. Zuma
Enrolled	:	Travel clock	-	Miss Nonhlanhla P. Wanda

R.K. Khan (Provincial Hospital for Indians)

Diploma	:	Gold fob watch	-	Miss Romela Moothiram
	:	Steel fob watch	-	Miss Nelyane Royan
Enrolled	:	Travel clock	-	Miss Komlavelli Nambiar

St. Augustines (Private Hospital)

Diploma	:	Gold fob watch	-	Mrs. M.J.S. Theron
Enrolled	:	Travel clock	-	Miss M. Barsdorf

Entabeni (Private Hospital)

Diploma	:	Gold fob watch	-	Mrs. J.A. Dunshea
	:	Steel fob watch	-	Miss J. Collingwood
Enrolled	:	Travel clock	-	Miss M.C. Naunton

LEGISLATION

During the course of the year the department responded to several invitations to comment upon proposed legislation and memoranda were lodged on the draft Health and National Building Regulations Bills and General Health Regulations proposed to be framed under the Health Act when adopted.

Following the discontinuation by the Department of Justice of the refund of fines accruing from prosecutions instituted by this department for contraventions of the Slums Act, which monies had hitherto been recovered, the necessary motivation for an amendment to the Act to authorise retention of fines by local authorities was made through the United Municipal Executive.

This department was instrumental in the adoption of a new General Bylaw (37A) prohibiting the installation of an airconditioning unit and any mechanical device for the extraction of air in such a way that heated, vitiated or condensed air or the product thereof are discharged directly into a public place. This arose from complaints of hot air blowing onto passers-by and condensate from wall units dripping onto footwalks.

A number of amendments were effected to the Public Health Bylaws, the most significant being the uplifting of the penalties to the maximum permitted by the new Local Authorities Ordinance viz. R200 in the case of a first offence and R400 for a subsequent conviction. This now allows more meaningful penalties to be imposed, especially when admissions of guilt are paid.

Considerable concern has arisen over the legal situation that obtains respecting meat including game introduced into the City from elsewhere which has traditionally been required to be taken direct to the Municipal Abattoir for proper meat inspection. Following the take-over of the abattoir by the Abattoir Commission, the State authorities concerned reluctantly allowed the

arrangement to continue pending the transfer within 18 months to a large regional complex at Cato Ridge, whereafter the local bylaws would insist upon consignment only to destinations within the City with the prior consent of the Medical Officer of Health. The continued use of the abattoir for this purpose in the interim was strongly supported by the Commission because of tariff considerations, but the attitude of the Department of Agricultural Technical Services has hardened to the extent that it appears the relaxations will be withdrawn in the near future. No undue risk is envisaged respecting meat per se because all quantities received from elsewhere would have been subjected to proper inspection undertaken or approved by the State, but the same cannot be said for game meat which is arriving unheralded from various parts of the country still virtually in the slaughter state. By the year end this department was still unable to stimulate any interest by Central or Provincial Government agencies towards ensuring the adoption of proper measures for the transportation and examination of game meat and is now having to face the probability of adopting some form of local bylaw control.

MONITORING OF DURBAN BATHING BEACHES

The City Medical Officer of Health continued to serve as Chairman of the Steering Committee re Monitoring of the Sea and Beaches in the Vicinity of Durban, which includes representatives of the National Institute for Water Research of the Council for Scientific and Industrial Research, Department of Health, and the City Engineer's Department. The Committee usually meets annually to consider comparative tables produced by the City Engineer's Department on their weekly monitoring findings and to review the Report by the Natal Regional Laboratories of the National Institute for Water Research of the surveys made of the sea and beaches in the vicinity of Durban on an annual contract basis. The findings for the year under review again stated unequivocally that despite some setbacks due to severe floods, the local bathing beaches continued to conform to the highest international standards and had been independently corroborated.

XIV. STAFF AND FINANCIAL SUMMARYAmendments to Staff Establishment

Section	Group	Designation of Post	No. of Posts	Remarks	Council Authority
<u>(a) Additions to Establishment</u>					
Health Inspection	White	Deputy Chief Health Inspector	1	Re-organisation	76-05-03
"	White	Divisional Health Inspector	4	"	76-05-03
"	White	Health Inspector	5	"	76-05-03
"	Indian	Senior Health Inspector	1	"	76-05-03
"	Coloured	Health Inspector	1	"	76-05-03
"	White	Health Assistant	1	"	76-06-01
Health Education	White	Community Health Nurse	1	"	76-06-01
"	Indian	Senior Lecturer	1	"	76-06-01
"	African	Senior Lecturer	1	"	76-06-01
"	Indian	Lecturer	7	"	76-06-01
"	African	Lecturer	6	"	76-06-01
"	Coloured	Lecturer	2	"	76-06-01
"	Indian	Assistant Lecturer	2	"	76-06-01
"	African	Assistant Lecturer	1	"	76-06-01
Administration	White	Woman Clerk	1	Regrading of Principal Woman Assistant	76-08-02
Family Planning	White/Non-White	Clinical Medical Officer	1	Expansion of Family Planning programme (Montanne House)	76-08-16
"	White	Senior Clinic Sister	1	"	76-08-16
"	White	Clinic Sister	1	"	76-08-16
"	Indian/Coloured	Clinic Sister	3	"	76-08-16
"	African	Clinic Sister	2	"	76-08-16
"	African	Labourer	2	"	76-08-16
Epidemiology	African	Clinic Sister	1	To serve African area.	76-09-07

Section	Group	Designation of Post	No. of Posts	Remarks	Council Authority
Field Hygiene	African/Indian	Senior Spotter	1	Conversion of vacant post of African Spotter	76-09-27
Family Health	White	Assistant Chief Nursing Officer	1	Regrading and Redesignation of post of Senior Community Health Nurse	76-12-06
(b) <u>Deletions from Establishment</u>					
Health Inspection	White	Senior Health Inspector	3	Re-organisation	76-05-03
Health Education	White	General Assistant	1	"	76-06-01
"	Indian	Junior Lecturer	6	"	76-06-01
"	African	"	5	"	76-06-01
Epidemiology	African	Health Assistant	2	"	76-06-01
Administration	White	Principal Woman Assistant	1	Regrade to Woman Clerk	76-08-02
Epidemiology	White	Clinic Sister	1	Converted to African Clinic Sister	76-09-07
Field Hygiene	African	Spotter	1	Converted to Senior Spotter (African/Indian)	76-09-27
Family Health	White	Senior Community Health Nurse	1	Regrade to Assistant Chief Nursing Officer	76-12-06

Ancillary Staff Matters

(i) Improvement in Remuneration

The Council's White salary grades were enhanced during the year and the non-White employees received two increases effective from 1 February 1976 and 1 August 1976. The holiday bonus for non-Whites was increased.

(ii) Rendering of Continuous Military Service : Municipal Employees

Improved leave benefits have been granted to affected employees called up for military service.

(iii) Locomotion Allowances

During the year improved rates became effective for persons in receipt of fixed and variable allowances.

Due to the re-organisation of the Health Inspectorate, 12 additional allowances were allocated to that section. Allowances were also allowed to the Health Educator and Deputy Community Liaison Officer.

(iv) Conditions of Service : Non-White Staff

Conditions of service have been approved for all non-White graded staff who have been granted greatly improved benefits and labourers are now eligible to join the Pension Fund after completion of one year's continuous service instead of three.

(v) Re-designation of Nurse (Indian/African/Coloured)

All posts of non-White Nurse have been redesignated Clinic Sister to bring them into line with their White counterparts.

(vi) Clinical Medical Officers

The restriction limiting the number of posts of Clinical Medical Officers which may be filled by non-Whites has been withdrawn and future appointments may be made irrespective of racial groups, provided that not more than 14 posts in all are filled at any one time.

(vii) Acting Appointments

Due to the inability to recruit a Senior Clinical Medical Officer it was necessary to appoint a temporary Clinical Medical Officer to the position in an acting capacity.

The successor to the Chief Nursing Officer who retired on 14 June 1976, was unable to assume duty during the year and it was consequently necessary to appoint the Deputy Chief Nursing Officer to an acting position of Chief Nursing Officer.

XIV. STAFF AND FINANCIAL SUMMARY
(including temporary employees)

STAFF ESTABLISHMENT

The authorised establishment as at 31 December 1976 was 278 White and 491 non-White staff members, subdivided as follows:-

ADMINISTRATIVE SECTION	NO.	EPIDEMIOLOGY (embracing tuberculosis, infectious diseases and venereal disease control)	NO.
<u>White</u>		(e) <u>Tuberculosis</u>	
City Medical Officer of Health, Dr. C.R. Meckenzie, M.B.; B.Ch.; D.P.H.; D.T.M. & H. (Rend); F.R.S.H.; F.I.P.H. (S.A.)	1	<u>White</u> Senior Clinical Medical Officer,	3
Deputy City Medical Officer of Health, Dr. N.L. Becker, M.B.; Ch.B.; D.P.H.; D.I.H.; B. Com.	2	Dr. P.R. Henson, M.R.C.S.; L.R.C.P.; D.P.H. Two positions VACANT.	
Dr. M.B. Richter, M.B.; B.Ch.; D.P.H.		Clinical Medical Officer, Dr. R.W.W. Bowes, M.R.C.S.; L.R.C.P.; M.A. (Cantab.)	4
Assistant Medical Officer of Health, Dr. R.H. Brown, M.B.; Ch.B.; D.P.H.; D.I.H. (With effect from 21/5/76) VACANT	2	Dr. E.M. Fisher, M.B.; B.Ch. Dr. J.C. Stuart, M.B.; Ch.B. Dr. J. Duncan, M.B.; Ch.B.	
Personal Assistant, Poplett, D.J.; M.R.S.H.	1	Senior Assistant (Administration), Johnston, M.J.; National Diploma for Health Inspectors (To 6/1/76) Broad, G.S. (With effect from 1/4/76)	1
Principal Assistant (Administration) Behn, A.L.; Cert. R.S.H.	1	Health Inspector	1
Senior Assistant (Technical), Johnston, M.J. (National Diploma for Health Inspectors) (With effect from 7.1.1976)	1	Chief Clerk (Grade II)	1
		X-Ray Technician	2
		Radiographer	2
		Operator X-Ray +	1
Senior Assistant (Financial) Dyer, R.B.; Cert. R.S.H.	1	Community Health Nurse	5
		Clinic Sister	3
Chief Clerk (Grade I, 2) (Grade II, 2)	4	Woman Clerk	1
		Senior Woman Assistant	1
Senior Clerk (Grade I, 1) (Grade II, 4) (Grade III, 1)	6	Clinic Assistant	3
		Typist	1
Records Clerk (Woman)	1	<u>Non-White</u>	
Women Clerk	5	Radiographer (African)+	1
Clark	8	Clinic Sister (Indian 1, African 2)	3
Senior Women Assistant	4	Health Assistant (Indian 12, African 19)	31
Woman Assistant	7	Nurse Aide (Indian 4, Coloured 1, African 7)	12
Chief Typist	2	Interpreter/Cleaner (Indian 1, African 4)	5
Senior Typist	2	Labourer (African)	5
Typist	3		
General Assistant (Unestablished)	1		
<u>Non-White</u>			
Health Assistant (African)	1		
Clerk (Grade I) (Indian)	1		
Sirdar (Class II) (Indian)	1		
Assistant (Indian)	7		
Watchman (African)	2		
Labourer (Indian)	1		
Total	65	Total	86

Staff Summary

White	52 +
Indian	10
African	3

(+ includes unestablished position)

Staff Summary

White	29
Coloured	1
Indian	18
African	38

(+ at no time shall the posts of Operator X-Ray (White) and Radiographer (African) be simultaneously occupied)

(b)	<u>Infectious Diseases</u>	NO.
	<u>White</u>	
	Senior Health Inspector,	1
	McIver, E.I., Certs. R.S.H.; Meat	
	and Other Foode (To 30/4/76)	
	Phillips, L.G.F., Certs. R.S.H.;	
	Meat and Other Foods (With effect	
	from 1/5/76)	
	Community Health Nurse	1
	General Assistant	1
	<u>Non-White</u>	
	Overseer (African)	1
	Labourer (Indian)	1
	Total	5
	<u>Staff Summary</u>	
	White 3	
	Indian 1	
	African 1	
(c)	<u>Venereal Diseases Clinic</u>	
	<u>White</u>	
	Senior Clinical Medical Officer,	1
	Dr. S. Ward, M.R.C.S.; L.R.C.P.	
	Clinical Medical Officer,	2
	Dr. H.B. Savage, M.R.C.S.; L.R.C.P.	
	Dr. J.D. Prestwich, M.B.; B.Ch.	
	<u>Non-White</u>	
	Clinic Sister (African)	4
	Health Aeeistant (African)	9
	Interpreter/Cleaner (African)	1
	Total	17
	<u>Staff Summary</u>	
	White 3	
	African 14	
	<u>HEALTH INSPECTION</u>	
	<u>White</u>	
	Chief Health Inspector,	1
	Ashdown, N.D. + (To 29/6/76)	
	Crickmore, C.R.A. (With effect from 30/6/76)	
	Deputy Chief Health Inspector,	2
	Crickmore, C.R.A. (To 29/6/76)	
	Vacant	
	Clark, A.G. (With effect from 3/8/76)	
	Green, C.E.O. + (With effect from 3/8/76)	
	Divisional Health Inspector	4
	Hogan, J.P. + (With affect from 24/8/76)	
	Marsh, H.N. + (With effect from 24/8/76)	
	Spencar, D.W. +* (With affect from 24/8/76)	
	Sutherland, F.T. +(With effect from 24/8/76)	
	Senior Health Inspector	10
	Black, D.N. +* (With effect from 1/6/76)	
	Clark, A.G. (To 2/8/76)	
	Green, C.E.O. + (To 2/8/76)	
	Griffin, R.E. +*	
	Hogan, J.P. +	
	Hull, V.H. +* (With effect from 1/7/76)	
	Knowles, D.H. +	
	Marsh, H.N. + (To 23/8/76)	
	Pearman, E.F.J. +*	
	Phillips, L.G.F. + (To 30/4/76)	
	Robarts, K.W.C. +*	
	Schou, M.S. +	
	Smith, L.J. +* (With effect from 14/9/76)	
	Spencer, D.W. +* (To 23/8/76)	
	Sutherland, F.T. + (To 23/8/76)	
	Worthington, R.C. +* (With effect from	
	14/9/76)	
	Young, N.R. +* (With effect from 14/9/76)	
	Health Inspector	45
	Laboratory Assistant (Entomology)	1
	Health Assistant	12
	Learner Health Inspector	28
	Pest Control:	
	Supervisor	1
	Senior General Assistant	1
	General Assistant	7
	<u>Non-White</u>	
	Senior Health Inspector,	1
	Singh, U. *ø (With effect from 1/9/76)	
	Health Inspactor (Indian 8, African 2,	11
	Coloured 1)	
	Overseer (Indian 2, African 4)	6
	Health Assistant (Indian 8, African 6,	15
	Coloured 1)	
	Aseistant (Indian 8, African 1)	9
	Senior Spotter (African/Indian) ø	1
	Spotter (Indian 3, African 9)	12
	Labourer (Indian 23, African 110)	133
	Total	300
	© Can be occupied by either Indian	
	or African.	
	Note: All Health Inspectors hold a certificate	
	recognised in terms of the Public Health Act and	
	such additional qualifications as indicated:	
	+ Meat and Other Foods Cartificate	
	* Tropical Hygiene Certificata	
	ø National Diploma in Health Education	
	<u>Staff Summary</u>	
	White 112	
	Coloured 2	
	Indian 53	
	African 133	

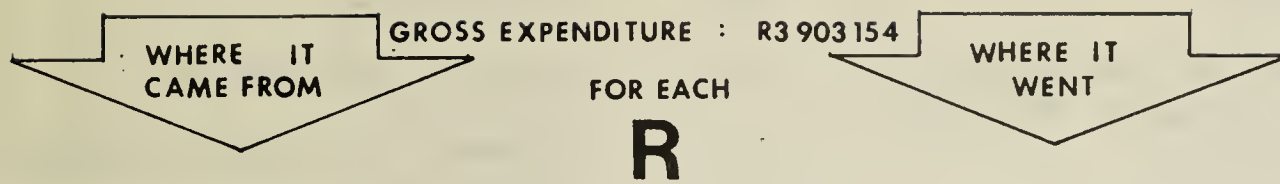
<u>VETERINARY HYGIENE</u>	NO.
<u>White</u>	
Veterinery Medicel Officer,	1
Dr. W.B. Hobbs, B. V.Sc.	
Medical Laboretory Technologist	1
Laboretory Assistant	1
<u>Non-White</u>	
Assistant (Laboratory) (Indian)	1
Total	4
<u>Staff Summary</u>	
White 3	
Indian 1	
<u>FAMILY HEALTH AND IMMUNIZATION</u>	
<u>White</u>	
Senior Clinical Medical Officer,	1
Dr. H.A.B. Pletts, M.B.; B.Ch.	
Clinical Medical Officer,	8
Dr. H.E. Rose, M.B.; Ch.B.	
Dr. J.L.B. Slabbert, M.B.; B.S.	
Dr. E. McMillen, M.B.; Ch.B.	
Chief Nursing Officer, Rankin, M.H.E. xx (To 14/6/76)	1
Deputy Chief Nursing Officer, Steed, R.J. xx	1
Assistant Chief Nursing Officer, Tyzack, P.M. x	1
Community Health Nurse	21
Senior Clinic Sister	1
Clinic Sister.	8
Clinic Aesietant	9
Pert-time Clinic Assietant	2
<u>Non-White</u>	
Senior Community Heelth Nurse (Indian 2, African 2)	4
Community Health Nurse (Coloured 4, Indian 16, African 20)	40
Clinic Sister (Coloured 1, Indian 18*, African 7)	26
Overseer (Indian)	1
Heelth Assistent (Indian 5, African 4)	9
Nurse Aide (Coloured 8, Indian 34, African 19)	61
General Aeeistant (Indian)	1
Assistant (Indian)	2
Interpreter/Cleener (Indian 11, African 8)	19
Labourer (African)	2
Total	218
<u>Staff Summary</u>	
White 53	
Coloured 13	
Indian 90	
African 62	
x General Nureing, Midwifery, Health Visitors	
and School Nurses Certificates	
xx Mothercraft Certificate in addition to above	
* Threa posts can be filled by either Indians or	
Coloureds dependent on eveilability.	
<u>FAMILY PLANNING MOTIVATION</u>	
<u>White</u>	
Family Planning Liāison Officer,	1
Adams, Mrs. A.E., B.Soc.Sc. (Nursing) (With effect from 1/4/76)	
Davison, Miss R.M. (General Nursing and Midwifery Certificates)	
(To 31/3/1976)	
Senior Field Worker (Indian 1, African 1)*	2
Field Worker (Coloured 2, Indien 11, African 10)*	23
Total	26
<u>Staff Summary</u>	
White 1	
Coloured 2	
Indian 12	
African 7	
* Employed in a temporary capacity and not included in	
establishment.	
<u>COMMUNITY LIAISON</u>	
<u>White</u>	
Community Liaison Officer,	1
Berman, Miss L.A., B.A. (Soc.Sc.); M.P.H. (To 26/3/76)	
O'Reagain, Mrs. M.L., M.Soc.Sc. (With effect from 29/3/76)	
Deputy Community Liaison Officer	1
Cohan, Miss L., B.A.(Hons.) (With effect from 1/6/76)	
Senior Community Liaison Worker (Vacant) *	3
Community Liaison Worker (Vacant) *	10
Total	15
<u>Staff Summary</u>	
White 2	
White/Non-	
White 13	
* These positions can be White or non-White.	
<u>HEALTH EDUCATION</u>	
<u>White</u>	
Health Educator, Ungerer, J.D., B.A.; T.H.E.D. (With effect from	1
3/5/76)	
Technician	1
Community Health Nurse	2
General Assistant	1
<u>Non-White</u>	
Senior Lecturer (Indien 1, African 1)	2
Lecturer (Coloured 3, Indian 8, Africen 8)	19
Assistant Lecturer (Indian 2, African 2)	4
Technical Assistant (Indian)	1
Total	31
<u>Staff Summary</u>	
White 5	
Coloured 3	
Indian 12	
African 11	
<u>MEDICAL BUREAU</u>	
Senior Clinical Medical Officer,	1
Dr. R.H. Brown, M.B.; Ch.B.; D.P.H.; D.I.H. (To 20/5/1976)	
Dr. P. Goldstuck, M.B.; B.Ch. (With effect from 2/8/1976)	
Part-time Clinic Assistant	1
<u>Staff Summary</u>	
White 2	
<u>TOTAL RACE GROUP SUMMARY +</u>	
White 278	
Coloured 21	
Indian 197	
African 273	
769	
+ Part-time medical officers not included.	

FINANCIAL SUMMARY

An abbreviated statement of the cost, excluding capital expenditure, of the services undertaken by the City Health Department for the financial year ended 31 July 1976, with comparative figures for the preceding year, is set out below:-

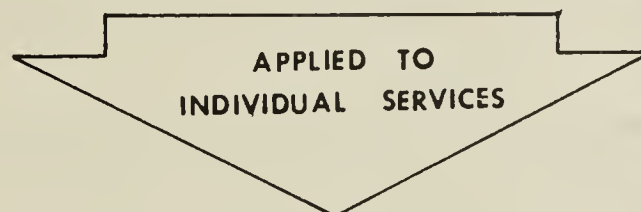
	<u>1975/6</u>	<u>1974/5</u>
	R	R
<u>Expenditure</u>		
Salaries, wages and allowances	2 724 757	2 372 742
Medical requisites	104 537	116 833
Tuberculosis hospitalisation	188 228	207 803
Hospitalisation of Infectious Diseases including Venereal Diseases	189 601	213 744
Transport and subsidised locomotion	170 425	144 040
Miscellaneous, including electricity, insurance, rents, rates, telephones, stationery, maintenance and loan charges	525 606	430 940
	<u>3 903 154</u>	<u>3 486 102</u>
<u>Income</u>	<u>1975/6</u>	<u>1974/5</u>
	R	R
General including hospital fees recovered	104 472	91 682
Government part-refunds: (Public Health Act)	1 441 044	1 388 327
Health Services debited to African hostels and locations	222 529	161 764
	<u>1 768 045</u>	<u>1 641 773</u>
Net Cost	<u>2 135 109</u>	<u>1 844 329</u>

1975/1976



BOROUGH FUND REVENUE ACCOUNT	55c
GOVERNMENT PART REFUND ON SALARIES, HOSPITAL FEES, CLINICS AND HOSPITAL FEES RECOVERED	37c
BANTU REVENUE CONTRIBUTION	6c
FEES AND GENERAL INCOME	2c

SALARIES, WAGES, ALLOWANCES AND ALLIED STAFF EXPENDITURE	70c
HOSPITAL AND AMBULANCE FEES MEDICINES AND LABORATORY SERVICES	13c
MISCELLANEOUS, INCLUDING ELECTRICITY, TRANSPORT, WATER, TELEPHONE, RENT, RATES, INSURANCE, ETC.	12c
LOAN CHARGES ON CAPITAL	3c
REPAIRS MAINTENANCE AND RENEWALS	2c



HEALTH INSPECTION INCLUDING FIELD HYGIENE	28c
TUBERCULOSIS CONTROL AND CLINICS	25c
FAMILY HEALTH	25c
ADMINISTRATION	13c
RENT, RATES, ELECTRICITY, TELEPHONES AND CLEANING	3c
VENEREAL DISEASES	2c
HEALTH EDUCATION	2c

NET COST PER CAPITA : R2,48 PER ANNUM

POPULATION : 861 142

Post Summary as at 31 December 1976

<u>White</u>	<u>No.</u>	<u>Non-White</u>	<u>No.</u>
Medical Officer	25	Health Inspector	12
Veterinary Medical Officer	1	Lecturer	25
Clerical	51	Community Health Nurse	44
Technician	1	Overseer	8
X-Ray Technician	2	Health Assistant	65
Radiographer	2	Clinic Sister	33
Operator X-Ray	1	Radiographer	1
Health Educator	1	Spotter	13
Health Inspector	64	Technical Assistant	1
Community Liaison Officer/Worker	15	Nurse Aide	73
Community Health Nurse	32	Clerical	1
Family Planning Liaison Officer	1	Sirdar (Class II)	1
Clinic Sister	12	Assistant (Laboratory)	1
Clinic Assistant	12	General Assistant	1
Clinic Assistant (Part-time)	3	Interpreter/Cleaner	25
Supervisor	1	Assistant	18
General Assistant	10	Watchman	2
Medical Laboratory Technologist	1	Labourer	142
Laboratory Assistant	2	Field Worker (Temporary)	25
Health Assistant	12		
Learner Health Inspector	28		
General Assistant - Clerical (Unestablished)	1		
	<u>278</u>		<u>491</u>

* Medical Personnel (Part-time)(a) Tuberculosis Clinic:

Consultant 1
Radiologist

Dr. E.H. Fine, M.B.; B.Ch.;
D.M.R.D.; R.C.P.

(b) Family Health and Immunization:

Consultant 1
Obstetrician and
Gynaecologist

Dr. S.T. Trezise, M.B.;
Ch.B.; M.R.C.O.G.

Consultant 1
Paediatrician

Dr. J.H. Clyde, M.B.;
B.Ch.; F.C.P.; D.C.H.

Clinical Medical Officer -

Numbers unlimited but restricted to a maximum of 220 hours per week less 40 hours per week for each additional Clinical Medical Officer employed in the Family Health Section.

* Not reflected in Staff Establishment table.

(Classified according to International Intermediate List of 150 Causes from Eighth Revision, World Health Organization, 1965)

Cause Group	CAUSE OF DEATH	WHITE			COLOURED			AFRICAN			INDIAN			TOTAL		
		M	F	Tot.	M	F	Tot.	M	F	Tot.	M	F	Tot.	M	F	Tot.
		1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975	1975
A 2	Typhoid fever	-	-	-	-	-	-	1	-	1	-	-	-	1	-	-
A 3	Paratyphoid fever and other salmonella infections	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1
A 4	Bacillary dysentery and amoebiasis	-	-	-	-	-	-	6	2	8	-	-	-	6	2	6
A 5	Enteritis and other diarrhoeal diseases	1	4	5	1	4	5	121	99	220	39	29	68	162	136	298
A 6	Tuberculosis of respiratory system	2	1	3	6	1	4	45	12	57	9	4	13	59	18	77
A 7	Tuberculosis of meninges and central nervous system	-	-	-	-	-	-	2	3	5	3	2	5	5	5	10
A 8	Tuberculosis of intestines, peritoneum and mesenteric glands	-	-	-	-	-	-	1	1	2	1	-	1	2	1	3
A 9	Tuberculosis of bones and joints	-	-	-	-	-	-	1	1	2	-	-	-	1	1	2
A 10	Other tuberculosis, including late effects	-	-	-	-	-	-	-	2	2	-	2	2	-	4	4
A 15	Diphtheria	-	-	-	-	-	-	2	1	3	-	-	-	2	1	3
A 19	Meningococcal infections	-	-	-	1	-	-	-	-	-	1	-	1	1	-	1
A 20	Tetanus	-	-	-	-	-	-	1	4	5	-	-	-	1	4	5
A 21	Other bacterial diseases	-	7	7	7	1	3	5	1	6	8	4	12	15	13	28
A 22	Acute poliomyelitis	-	-	-	-	-	-	1	-	1	-	-	-	1	-	1
A 25	Measles	1	1	2	-	-	1	16	15	31	5	1	6	23	17	40
A 27	Viral encephalitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 28	Infectious hepatitis	1	-	1	-	-	-	1	-	1	-	3	3	2	3	5
A 29	Other viral diseases	-	-	-	-	-	-	1	-	1	-	-	-	1	-	1
A 44	All other infective and parasitic diseases	1	-	1	1	-	-	-	-	-	-	1	1	1	1	2
A 45	Malignant neoplasm of buccal cavity and pharynx	10	3	13	10	1	4	4	1	5	1	3	4	18	8	26
A 46	Malignant neoplasm of oesophagus	6	7	13	8	1	4	28	9	37	1	4	5	38	21	59
A 47	Malignant neoplasm of stomach	11	10	21	20	1	3	3	1	4	9	9	18	25	21	46
A 48	Malignant neoplasm of intestine, except rectum	14	12	26	42	-	1	1	-	1	1	2	3	16	15	31

Cause Group	CAUSE OF DEATH	WHITE				COLOURED				AFRICAN				INDIAN				TOTAL			
		M	F	Tot.	1975	M	F	Tot.	1975	M	F	Tot.	1975	M	F	Tot.	1975	M	F	Tot.	1975
A 49	Malignant neoplasm of rectum and rectosigmoid junction	6	6	12	9	-	-	-	-	1	-	-	1	2	4	6	7	9	10	19	17
A 50	Malignant neoplasm of larynx	10	-	10	5	-	-	-	2	2	-	-	2	-	1	1	1	12	1	13	11
A 51	Malignant neoplasm of trachea, bronchus and lung	71	19	90	117	7	1	8	5	14	1	15	24	19	4	23	13	111	25	136	159
A 52	Malignant neoplasm of bone	-	-	-	2	-	-	-	-	1	1	2	1	-	-	-	2	1	1	2	5
A 53	Malignant neoplasm of skin	2	3	5	10	-	-	-	-	-	1	1	-	-	-	-	-	2	4	6	10
A 54	Malignant neoplasm of breast	-	39	39	31	-	1	1	3	-	3	3	7	-	9	9	5	-	52	52	46
A 55	Malignant neoplasm of cervix uteri	1	6	7	6	-	6	6	2	-	17	17	12	-	1	5	10	1	34	35	30
A 56	Other malignant neoplasm of uterus	1	2	3	5	-	-	-	1	-	1	1	1	-	1	-	4	1	3	4	11
A 57	Malignant neoplasm of prostate	21	-	21	22	3	-	3	1	4	-	4	2	4	-	4	1	32	-	32	26
A 58	Malignant neoplasm of other and unspecified sites	50	44	94	77	2	7	9	9	30	24	54	44	15	18	33	46	97	93	190	176
A 59	Leukaemia	7	6	13	12	2	-	2	-	2	1	3	2	7	2	9	10	18	9	27	24
A 60	Other neoplasms of lymphatic and haematopoietic tissue	3	5	8	9	2	1	3	5	3	-	3	1	4	2	6	7	12	8	20	22
A 61	Benign neoplasms and neoplasms of unspecified nature	6	-	6	1	1	-	1	-	1	4	5	-	2	1	3	1	10	5	15	2
A 63	Thyrototoxicosis with or without goitre	-	-	-	2	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	2
A 64	Diabetes mellitus	8	16	24	7	2	2	4	2	6	16	22	22	40	59	99	62	56	93	149	93
A 65	Avitaminoses and other nutritional deficiency	1	-	1	-	-	1	1	1	12	17	29	51	2	1	3	9	15	19	34	61
A 66	Other endocrine and metabolic diseases	1	2	3	-	-	-	-	-	6	3	9	7	2	4	6	3	9	9	18	10
A 67	Anaemias	3	1	4	3	-	-	-	-	3	2	5	6	7	5	12	8	13	8	21	17
A 68	Other diseases of blood and blood-forming organs	-	2	2	1	-	-	-	1	-	-	-	-	1	1	2	-	1	3	4	2
A 70	Neuroses, personality disorders and other non-psychotic mental disorders	1	-	1	3	-	-	-	1	1	-	1	3	1	1	-	6	3	-	3	13
A 72	Meningitis	2	-	2	3	2	2	4	1	8	13	21	19	12	7	19	16	24	22	46	39
A 73	Multiple sclerosis	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-
A 74	Epilepsy	-	-	-	-	-	-	-	3	6	3	9	2	2	2	4	1	8	5	13	6
A 78	Otitis media and mastoiditis	-	-	-	1	-	-	-	2	-	2	2	-	-	-	-	-	-	2	2	3
A 79	Other diseases of nervous system and sense organs	4	5	9	13	2	1	3	2	12	6	18	12	13	5	18	13	31	17	48	40

Cause Group	CAUSE OF DEATH	WHITE				COLOURED				AFRICAN				INDIAN				TOTAL			
		M	F	Tot.	1975	M	F	Tot.	1975	M	F	Tot.	1975	M	F	Tot.	1975	M	F	Tot.	1975
A 80	Active rheumatic fever	-	-	-	1	-	-	-	1	1	2	1	3	2	5	1	4	3	7	3	
A 81	Chronic rheumatic heart disease	3	5	8	8	1	-	1	1	4	3	7	6	3	2	5	11	10	21	30	
A 82	Hypertensive disease	17	21	38	70	3	4	7	15	20	8	28	59	49	45	94	89	78	167	377	
A 83	Ischaemic heart disease	231	180	411	458	15	10	25	13	10	-	10	14	218	85	303	474	275	749	763	
A 84	Other forms of heart disease	102	93	195	120	8	8	16	8	56	42	98	80	65	51	116	231	194	425	309	
A 85	Cerebrovascular disease	92	112	204	130	10	11	21	20	36	44	80	54	109	107	216	247	274	521	310	
A 86	Diseases of arteries, arterioles and capillaries	35	51	86	133	2	1	3	3	5	2	7	13	5	3	8	47	57	104	171	
A 87	Venous thrombosis and embolism	11	14	25	14	1	3	4	2	3	1	4	4	1	4	5	16	22	38	27	
A 88	Other diseases of circulatory system	-	3	3	-	-	-	-	1	3	1	4	3	1	-	1	4	4	8	5	
A 89	Acute respiratory infections	-	1	1	-	-	-	-	-	-	-	-	2	2	-	2	2	1	3	4	
A 90	Influenza	-	-	-	1	-	-	-	-	1	-	1	-	-	-	-	1	-	1	6	
A 91	Viral pneumonia	2	1	3	-	2	-	2	-	2	4	6	-	-	2	-	6	7	13	-	
A 92	Other pneumonia	48	54	102	74	7	12	19	12	81	65	146	108	76	54	130	212	185	397	310	
A 93	Bronchitis, emphysema and asthma	38	12	50	48	4	4	8	7	16	11	27	28	27	33	60	85	60	145	152	
A 95	Empyema and abscess of lung	-	-	-	1	-	1	1	-	4	3	7	4	2	-	2	6	4	10	6	
A 96	Other diseases of respiratory system	17	8	25	25	5	3	8	5	39	26	65	56	13	5	18	74	42	116	106	
A 98	Peptic ulcer	8	8	16	7	1	1	2	2	-	-	-	2	2	3	5	11	12	23	20	
A 99	Gastritis and duodenitis	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	-	
A 100	Appendicitis	-	1	1	1	-	-	-	-	1	1	2	1	-	-	-	1	2	3	3	
A 101	Intestinal obstruction and hernia	5	4	9	10	-	2	2	1	2	1	3	5	2	2	4	9	9	18	20	
A 102	Cirrhosis of liver	15	12	27	34	2	3	5	6	19	12	31	37	32	12	44	68	39	107	124	
A 103	Cholelithiasis and cholecystitis	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	1	
A 104	Other diseases of digestive system	18	12	30	29	6	1	7	1	26	12	38	189	23	8	31	73	33	106	251	
A 105	Acute nephritis	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1	1	-	
A 106	Other nephritis and nephrosis	2	-	2	8	-	-	-	1	-	2	2	11	3	1	4	5	3	8	24	
A 107	Infections of kidney	1	1	2	2	-	-	-	1	3	1	4	3	3	3	6	7	5	12	10	
A 109	Hyperplasia of prostate	-	-	-	-	-	-	-	-	2	-	2	1	-	-	-	2	-	2	1	
A 111	Other diseases of genito-urinary system	18	9	27	16	2	1	3	-	16	16	32	20	22	27	49	58	53	111	59	
A 112	Toxaemias of pregnancy and the puerperium	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1	1	-	
A 113	Haemorrhage of pregnancy and childbirth	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	1	1	3	
A 115	Other and unspecified abortion	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	-	2	2	4	
A 117	Other complications of pregnancy, childbirth and the puerperium	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	2	

Cause Group	CAUSE OF DEATH	WHITE				COLOURED				AFRICAN				INDIAN				TOTAL			
		1975		Tot.		1975		Tot.		1975		Tot.		1975		Tot.		1975		Tot.	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
A 119	Infections of skin and subcutaneous tissue	-	1	-	-	-	-	-	3	-	3	-	-	-	-	-	4	-	4	-	1
A 120	Other diseases of skin and subcutaneous tissue	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	1	-	1	-	2
A 121	Arthritis and spondylitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2
A 125	Other diseases of musculoskeletal system and connective tissue	1	1	-	2	-	2	-	1	-	1	-	-	-	-	-	4	-	4	-	3
A 126	Spina bifida	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 127	Congenital anomalies of heart	4	-	6	2	2	-	2	1	2	1	7	7	14	11	13	8	21	21	21	21
A 128	Other congenital anomalies of circulatory system	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	1
A 130	All other congenital anomalies	2	4	8	2	-	1	3	2	30	6	4	7	14	29	15	14	29	67	67	67
A 131	Birth injury and difficult labour	-	-	1	-	1	-	-	9	9	16	1	1	2	-	10	8	18	11	11	11
A 132	Conditions of placenta and cord	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-
A 133	Haemolytic disease of newborn	1	-	-	-	-	-	-	1	-	1	-	-	-	-	2	-	2	-	9	9
A 134	Anoxic and hypoxic conditions not elsewhere classified	5	1	6	4	2	3	7	15	33	26	9	11	20	36	33	26	59	82	82	82
A 135	Other causes of perinatal morbidity and mortality	28	10	38	17	30	13	30	159	358	304	115	98	213	213	319	266	585	650	650	650
A 136	Senility without mention of psychosis	6	15	21	1	4	3	4	-	8	3	3	5	8	32	10	26	36	137	137	137
A 137	Symptoms and other ill-defined conditions	48	30	78	29	41	12	38	300	388	522	104	56	160	126	481	320	801	618	618	618
AE138	Motor vehicle accidents	25	6	31	18	24	6	20	2	1	2	61	18	79	102	106	30	136	154	154	154
AE139	Other transport accidents	2	-	2	2	2	-	2	-	1	-	8	-	8	8	12	-	12	10	10	10
AE140	Accidental poisoning	-	-	-	-	-	-	-	-	-	-	2	-	2	-	2	-	2	-	-	-
AE141	Accidental falls	10	2	12	1	1	-	1	-	-	-	5	-	5	4	16	2	18	7	7	7
AE142	Accidents caused by fires	1	-	1	-	-	-	-	-	1	-	-	-	1	13	1	1	2	16	16	16
AE143	Accidental drowning and submersion	-	1	1	-	-	-	-	-	-	-	8	-	8	10	8	1	9	16	16	16
AE145	Accidents mainly of industrial type	2	-	2	-	-	-	-	-	-	-	4	1	5	6	6	1	7	8	8	8
AE146	All other accidents	5	-	5	-	2	2	2	1	1	2	6	7	13	6	12	10	22	15	15	15
AE147	Suicide and self inflicted injury	18	7	25	2	3	1	3	-	-	-	16	9	25	30	36	17	53	63	63	63
AE148	Homicide and injury purposely inflicted by other persons; legal intervention	7	5	12	21	23	2	15	3	1	3	21	3	24	27	52	10	62	49	49	49
AE149	Injury undetermined whether accidentally or purposely inflicted	5	-	5	3	3	-	3	10	1	11	16	4	20	9	34	5	39	18	18	18
	TOTALS	1080	886	1966	209	351	142	300	1208	2089	2135	1270	876	2146	2189	3767	2831	6598	6518	6518	6518
	CRUDE DEATH RATE	9,12 (9,16)				6,80 (6,02)				8,88 (8,97)				6,07 (6,45)				7,66 (7,81)			

Cause Group	CAUSE OF DEATH	WHITE			COLOURED			AFRICAN			INDIAN			TOTAL				
		1975		Tot.	1975		Tot.	1975		Tot.	1975		Tot.	1975		Tot.		
		M	F		M	F		M	F		M	F		M	F			
A 3	Paratyphoid fever and other salmonella infections	-	-	-	-	-	-	-	2	2	1	-	-	-	-	2	2	1
A 5	Enteritis and other diarrhoeal diseases	1	-	1	-	3	-	93	71	164	89	29	18	47	60	92	216	152
A 6	Tuberculosis of the respiratory system	-	-	-	-	-	-	1	1	2	1	-	1	1	1	2	3	2
A 7	Tuberculosis of meninges and central nervous system	-	-	-	-	-	-	-	2	2	-	-	1	1	-	3	3	-
A 15	Diphtheria	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-
A 20	Tetanus	-	-	-	-	-	-	1	3	4	2	-	-	-	1	3	4	3
A 21	Other bacterial diseases	-	1	1	-	-	2	1	-	1	2	2	1	3	2	2	5	7
A 22	Acute poliomyelitis	-	-	-	-	-	-	1	-	1	1	-	-	-	-	-	1	1
A 25	Measles	1	-	1	-	1	-	8	7	15	27	1	-	1	3	11	7	30
A 29	Other viral diseases	-	-	-	-	-	-	1	-	1	-	-	-	-	-	1	1	-
A 59	Leukaemia	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1	1	-
A 61	Benign neoplasms and neoplasms of unspecified nature	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-
A 65	Avitaminoses and other nutritional deficiency	-	-	-	-	-	1	5	4	9	23	-	1	1	5	5	10	29
A 66	Other endocrine and metabolic diseases	-	-	-	-	-	-	2	1	3	1	-	-	-	1	2	3	2
A 67	Anaemias	-	-	-	1	-	-	-	-	-	-	2	-	2	-	-	2	1
A 72	Meningitis	-	-	-	2	1	2	2	8	10	8	6	4	10	6	9	22	16
A 78	Otitis media and mastoiditis	-	-	-	-	-	-	-	1	1	-	-	-	-	-	1	1	-
A 79	Other diseases of nervous system and sense organs	-	-	-	-	1	-	-	2	2	-	2	-	2	1	2	5	1
A 84	Other forms of heart disease	1	-	1	-	-	-	1	1	2	2	1	1	2	3	3	5	5
A 85	Cerebrovascular disease	-	-	-	-	1	1	3	5	8	3	4	1	5	4	6	14	8
A 86	Diseases of arteries, arterioles and capillaries	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	1	-
A 90	Influenza	-	-	-	-	-	-	1	-	1	-	-	-	-	1	-	1	1
A 91	Viral pneumonia	-	-	-	-	-	1	-	1	1	-	-	2	2	-	1	4	-
A 92	Other pneumonias	2	4	6	2	2	4	26	38	64	43	20	15	35	31	48	107	80
A 93	Bronchitis, emphysema and asthma	-	-	-	-	-	-	2	1	3	2	-	2	2	2	2	5	4
A 95	Emphysema and abscess of lung	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	-
A 96	Other diseases of respiratory system	-	-	-	1	-	2	5	1	6	5	1	-	1	-	6	7	8
A 101	Intestinal obstruction and hernia	-	-	-	-	-	-	-	1	1	2	-	2	2	-	-	3	2
A 104	Other diseases of digestive system	-	-	-	-	-	-	2	1	3	112	1	1	2	2	3	2	5
A 111	Other diseases of genito-urinary system	1	-	1	1	-	-	-	1	1	-	1	1	2	-	2	4	1
A 119	Infections of skin and subcutaneous tissue	-	-	-	-	-	-	-	1	1	1	-	-	-	-	1	1	-
A 126	Spina bifida	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-
A 127	Congenital anomalies of heart	2	-	2	6	-	2	-	1	1	1	4	5	9	10	8	14	18
A 130	All other congenital anomalies	-	4	4	4	3	-	4	2	6	28	7	5	12	24	13	25	56
A 131	Birth injury and difficult labour	-	-	-	-	-	1	9	7	16	9	1	1	2	-	10	8	10
A 132	Conditions of placenta and cord	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	-
A 133	Haemolytic disease of newborn	1	-	1	-	-	-	1	-	1	1	-	-	-	8	2	2	9
A 134	Anoxic and hypoxic conditions not elsewhere classified	5	1	6	11	3	6	15	11	26	33	9	10	19	36	32	25	57
A 135	Other causes of perinatal mortality and mortality	28	10	38	42	17	30	158	145	303	357	115	97	212	212	318	265	648
A 137	Symptoms and other ill-defined conditions	3	1	4	-	2	2	67	74	141	99	6	6	12	24	78	81	126
AE138	Motor vehicle accidents	1	-	1	-	-	-	-	-	-	1	-	-	-	-	1	-	1
AE145	Accidents mainly of industrial type	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	-
AE146	All other accidents	-	-	-	1	-	-	-	-	-	-	1	1	2	1	1	2	2
	TOTAL	46	21	67	73	32	24	411	394	805	854	216	177	393	438	705	616	1 421

AGE AT DEATH

The number of deaths at various ages, with the percentage of total deaths, is summarised in the following table :-

1976

RACE GROUPS	A G E G R O U P S																Total	
	0 - 1		1 - 4		5 - 14		15 - 24		25 - 44		45 - 64		65 & over					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
White	46	21	4	3	5	3	16	7	66	25	341	195	602	632	1 080	886		
	32	24	4	3	5	6	17	1	40	27	65	35	46	46	209	142		
	411	394	109	97	21	15	19	29	181	111	349	169	118	112	1 208	927		
	216	177	35	28	32	20	58	29	188	96	465	285	276	241	1 270	876		
Total Non-White	659	595	148	128	58	41	94	59	409	234	879	489	440	399	2 687	1 945		
Total of all races	705	616	152	131	63	44	110	66	475	259	1 220	684	1 042	1 031	3 767	2 831		
White	4,26	2,37	0,37	0,34	0,46	0,34	1,48	0,79	6,11	2,82	31,57	22,01	55,75	71,33	100	100		
	15,31	16,90	1,91	2,11	2,39	4,23	8,13	0,70	19,14	19,01	31,10	24,65	22,02	32,40	100	100		
	34,02	42,50	9,02	10,46	1,74	1,62	1,57	3,13	14,98	11,97	28,89	18,23	9,78	12,08	100	100		
	17,01	20,21	2,76	3,20	2,52	2,28	4,57	3,31	14,80	10,96	36,61	32,53	21,73	27,51	100	100		
Total Non-White	24,53	30,59	5,51	6,58	2,16	2,11	3,50	3,03	15,22	12,03	32,70	25,14	16,38	20,52	100	100		
Total of all Races	18,72	21,76	4,04	4,63	1,67	1,55	2,92	2,33	12,60	9,15	32,39	24,16	27,66	36,42	100	100		

Amongst the Non-Whites, 27,07 per cent (Coloured 15,95; African 37,70; Indian 18,31) of all deaths occurred under the age of one year, as compared with 3,41 per cent in the White group.

Deaths under five years of age constituted 3,76 per cent of all deaths in Whites compared with 33,03 per cent in other groups (Coloureds 17,95; Africans 47,35; Indians 21,25).

Deaths under 25 years of age constituted 5,34 per cent of all deaths in Whites compared with 38,47 per cent amongst the other communities as a whole.

HOUSING

Staff

The Housing inspectorate comprised a senior health inspector, two health inspectors and a learner health inspector engaged on housing matters generally, demolitions and slum clearance.

Building Plans

The plans for residential development referred to this department during the year for approval on public health grounds can be summarised as follows:-

Accommodation	Rooms						Units	Plans
	1	2	3	4	5	6+		
Dwellings	-	1	28	188	322	312	851	851
Flats	29	185	413	465+	-	-	1 092	73
Other residential	-	-	-	-	-	-	-	4
Additions	-	-	-	-	-	-	-	3 173
Total	29	186	441	653	322	312	1 943	4 101

+ This figure includes flats with more than four rooms.

Demolitions and Conversions

In terms of the Housing Act, no person may demolish, or convert to other use, accommodation used for housing without the approval of the Minister, for which purpose application must first be lodged with the local authority.

In the course of the year, 127 applications were submitted in respect of premises occupied (or previously occupied) by 49 White, 6 Coloured and 40 Indian families. Of these premises, 48 were found to be owner-occupied, 47 were occupied by tenants and 32 were vacant. Departmental recommendation was conditional upon the occupiers obtaining alternative accommodation. Applications not supported on public health grounds amounted to 33.

These applications for permission to demolish or convert dwellings were lodged with the undermentioned projects in view:-

New dwellings	.....	48
Flats/maisonettes	.....	20
Industrial use	.....	12
Commercial purposes.....		27
Miscellaneous	.....	9
No immediate development....		11
		<hr/>
		127
		<hr/>

Slum Clearance

This department's programme continued throughout the year. Of the 148 premises processed, 12 were occupied by families of the Coloured group and 100 by Indians. Premises occupied by persons of more than one community group totalled 31, whilst five premises were vacant. The total number of persons involved was 2 967 comprising 957 family units.

The Slum Clearance Court was convened on 46 occasions and after due enquiry issued slum declarations in respect of 134 premises.

The Court ordered total demolition in the majority of cases, the remainder of the orders being for partial repair/demolition or repairs to the satisfaction of the local authority.

Not all cases processed departmentally were proceeded with or declared slums, either due to acquisition of ownership by the housing authorities or compliance by the owner with the requirements of this department.

During the course of the year the City Treasurer, the letting authority for municipal schemes, allocated housing accommodation as a priority to 19 Indian families and 19 Coloured families who were residing in declared slum premises, whilst the Department of Community Development similarly resettled 30 Indian families in State housing.

In order to appreciate the extent of departmental activities from the time slum clearance was resuscitated in 1965 to the end of the current year (1976), the following data is relevant:-

1. (a) Number of premises processed according to community group of occupants:-

White	125
Coloured	167
African	25
Indian	1 061
Mixed races	336
Chinese	1
Vacant	38

1 753

2. (a) Building units involved: 2 275
 (b) Family units housed therein: 7 984
 (c) Persons affected 33 289

3. Slum Clearance Court sittings: 549

4. The Slum Clearance Court ordered:

(a) Total demolition: 888
 (615 implemented)

(b) Partial repair/demolition: 146
 (58 complied with and 14
 totally demolished)

(c) Renovation to the satis-
 faction of the local
 authority: 52
 (25 completed)

Total Slum Declarations: 1 086

5. Rescission Orders granted: 623

6. Appeals to Minister against
 declaration:

(a) Dismissed 11

(b) Upheld 1

7. Premises pending Court hearing: 132

8. Prosecutions for non-compliance:

(a) Cases instituted: 84

(b) Fines: R2 470

NOTE:

Unlike previous years, there are no statistics for voluntary repair/demolitions as all cases are now brought to Court. Furthermore, no cases are taken where ownership by a public authority is contemplated.

The position with regard to premises processed can be summarised as follows:-

Slum Declarations	1 086
Voluntary compliance/withdrawn	535
Pending	132
	<hr/>
Total	1 753
	<hr/> <hr/>

HOUSING FOR WHITES

The 210 flats in the Hillary housing scheme at Arundel Road which have been under construction for some time were completed during the course of the year. Difficulty, however, was experienced in letting the flats. This was mainly attributable to the isolated location of the scheme. There is a steady demand for letting accommodation but this demand is satisfied from the number of units vacated monthly.

The project to construct a block of sub-economic flats in South Beach Avenue, Point, reached the stage where working drawings were completed and tenders are expected to be invited at an early stage.

National Housing Commission approval is awaited for the proposed block of sub-economic flats in Waynes Avenue, Botanic Gardens, which are to replace Denny Court which is situated in a nearby locality.

A feasibility study was undertaken of a possible cluster-type housing development for the lower income group to be situated in Bellair.

The following public housing units were available at the year end:-

1 325 Economic units

89 Sub-economic units and accommodation for 651 persons in old age homes (the latter administered by the Association for Homes for Retired Durban Citizens).

The Department of Community Development had the following projects in hand for White housing:-

(a) Wentworth

The development of 29 building lots in the new Brighton area is planned but will only be undertaken when funds become available.

(b) Bluff

Eight flats in Bushlands Road were completed and occupied.

(c) South African Police - Argyle and Ridge Roads

A block of 119 flats for married policemen was completed in Argyle Road. This development is the first phase of a complex of 357 flats. A block of 60 flats, also for married quarters, is being constructed in Ridge Road and completion is anticipated in mid-1977.

Urban Renewal

The Minister for Community Development designated several areas within the City for urban renewal for the White population group. These comprised Cato Manor, a portion of Bellair, and Prospect Hall and Riverside in Durban North.

The object is not to build houses but to clear the slums, consolidate the land and re-subdivide it into suitable sites for houses to be constructed by private individuals under sound town planning principles. In order to do this and finally register the new lay outs all the land in the designated areas had to be acquired by the developing authority. Progress by the Department of Community Development in respect of all designated areas was as follows:-

Umgeni Park:

This area, previously called Riverside, was re-planned for a population of 3 800 and redeveloped in two phases. The first phase was registered during 1973 and the second phase during March 1976.

The two phases together, besides the amenities previously mentioned, consist of 149 single residential lots; 37 duplex sites for 234 dwelling units; and 24 flat sites for 586 dwelling units.

To date 100 single residential sites, 13 duplex sites and 9 flat sites have been sold.

Mangrove Park:

This area, previously known as Prospect Hall, was planned for a population in the region of 6 500, and was registered as a township during March 1976. It provides, apart from other amenities; a regional shopping centre; 2 single residential lots; 6 duplex sites (100 dwelling units); 1 maisonette site (27 dwelling units); and 10 flat sites (1 011 dwelling units).

So far two single residential sites and seven flat sites have been sold.

Waterval Park:

This township, which is in the vicinity of Westridge Park, was registered towards the end of 1972 and the portion situated on the northern side provides industrial sites, while the south western area is zoned for general residential usage. It comprises 21 flat sites (for approximately 2 000 dwelling units), a park, shopping site and a school site.

Thus far seven flat sites have been sold.

Cato Manor

(a) Randrus

This township was planned for a population of some 1 500, and apart from a school site and a sports field, provides for 153 single residential sites and 4 flat sites for 354 dwelling units.

To date 100 single residential sites and 2 flat sites have been sold.

(b) Glenmore West

This area has been planned for a population of about 800 persons and besides amenities, makes provision for 47 single residential lots, 13 duplex sites, and 3 flat sites for 66 dwelling units.

The City Engineer is at present preparing to register the Certificate of Consolidated Title, prior to registration of the township, and the construction of the roads and other services are scheduled to being in the forthcoming financial year.

(c) Umkumbaan

The replanning of this area has been completed and provides 2 000 dwelling units for a population of 6 500. Development is being implemented by the Durban Corporation and installation of services has reached an advanced stage.

(d) Randgebied Extension

The replanning of this area has been completed and the installation of services is programmed for the forthcoming financial year. However, survey of the township area is still in progress.

The proposed township has been planned for a population of approximately 6 900, and apart from amenities, comprises 206 single residential lots, 38 duplex sites for 477 dwelling units and 13 flat sites for 1 358 dwelling units.

(e) Bonella

The replanning of this area has been completed and the services are being designed. Construction of roads and services are programmed for the year 1978/79. Survey of the new subdivisional layout has not yet been completed.

The proposed township has been planned for a population of 9 060 and besides amenities, will consist of 200 single residential lots, 58 duplex sites for 842 dwelling units and 32 flat sites for 1 574 dwelling units.

The construction of services and registration of the township will probably take place in two phases.

(f) Wiggins Estate

Replanning of the area was completed some years ago, but the planning proposals could not be implemented as the trunk sewer had not been constructed. Installation of services has now been programmed for 1979/80.

The proposed township has been planned for a population of 1 800 and besides amenities, will provide for 181 single residential lots, 13 duplex sites for 151 dwelling units and 6 flat sites for 183 dwelling units.

(g) Wiggins South

Replanning of the area is complete and provides for a population of approximately 8 200. In addition to other amenities, provision has been made for 297 single residential sites, 88 duplex sites for 652 dwelling units and 35 flat sites for 1 484 dwelling units.

Replanning of the remaining areas of Cato Manor have not yet received attention.

Portion of Bellair

The planning proposals for part of Bellair have been approved by both the Community Development Board and the Durban City Council. The plan was advertised during November 1976. The township makes provision for some 6 150 persons and residential planning is made up of 841 single residential units, 20 duplex sites for 370 residential units, and 9 flat sites for 543 residential units.

Two housing schemes, one low-cost, will be initiated by the Durban Corporation in this area.

HOUSING FOR COLOURED

Municipal letting schemes for this group at 31 December 1976 comprised 144 economic units and 533 sub-economic units.

Merebank/Wentworth

A contract was awarded for the erection of 80 low cost sub-economic units and work progressed satisfactorily on these.

Delays were experienced in the construction of the 360 flats in three high-rise blocks on the Sydenham Hotel site. It is anticipated, however, that construction of these buildings will be completed in the next financial year.

Working drawings for a scheme of 36 economic flats in York Place, Sydenham, were completed. It is anticipated that tenders will be invited in July 1977.

Investigations were put in hand for a low-rise development with a maximum of four floors in height for the Villa Road area, Mayville.

Newlands East

The installation of services for the first localities to be occupied was completed. Tenders were received for the construction of 1 194 dwellings and, by the end of 1976, work had commenced and good progress was being made.

The planning of further sectors of this township are well in hand and tenders are to be invited at an early stage.

The Department of Community Development has the following projects in hand:-

(a) Austerville

The construction of 60 flats was started and should be completed early in 1977. The flats are to be used to alleviate the overcrowded conditions in this area.

Sparks Estate

A site for the construction of 56 flats has been handed over to the contractors.

Greenwood Park

A scheme for the erection of 17 duplex units is still under consideration.

Mariannhill:

The construction of 360 low cost economic flats and 242 low cost economic houses was started, the first to be ready for occupation early in 1977.

Although this area is outside the borough it will greatly assist in alleviating the shortage of housing for the Coloured community in Durban.

HOUSING FOR INDIANS

Municipal letting units at 31 December 1976 were as follows:-

12 304 economic units at Chatsworth of which 5 569 units have converted for purchasing;

7 118 sub-economic units at Chatsworth;

202 sub-economic units at Merebank;

695 sub-economic units at Springfield;

348 economic units at Phoenix;

756 sub-economic units at Phoenix; and accommodation for

49 persons in old age homes (the latter administered by the Aryan Benevolent Society).

Chatsworth

No new dwellings were constructed in Chatsworth by the City Council during the past year. The number of units constructed and handed over therefore remains at 20 498.

Phoenix

Good progress was made with this scheme to the north of the City during the course of the year. The installation of services continued and in all 400 sub-economic and 100 economic units were completed.

A contract for 690 dwellings in community area No.5 was placed and work on site expected to start early in 1977.

Tender documents for 1 232 dwelling units in Community area No.10 are being prepared and tenders will be invited at an early date.

Development of recreation fields and open green areas adjoining the completed dwelling units were also put in hand during the year.

Newlands

The development of this proposed new township has been delayed because of restrictions on Government housing fund allocations. None the less further project applications were submitted during the year for approval.

Shallcross (outside the City boundary)

Construction by the Department of Community Development of 129 houses was completed and all were sold and occupied. That Department is now investigating the acquisition of land in the Klaarwater area (which adjoins Shallcross) where development will probably be undertaken in collaboration with the Durban City Council.

HOUSING FOR AFRICANS

(a) Areas under the control of the Port Natal Bantu Affairs Administration Board

(i) kwaMashu Township:

No work for the Board was undertaken in this township during the year.

(ii) Umlazi Glebe:

A further two hostel blocks were handed over to the Board making a total of 11 occupied blocks containing 2 816 beds for single African males.

However, owing to the lack of funds work ceased midway during the year and the project was handed back to the Board.

(b) Schemes being developed by the City Council outside the City on behalf of the South African Bantu Trust

(i) Umlazi Township:

A total of 386 houses was completed and handed over for occupation during the year under review and steady progress was made with the construction of services. Special attention was given also to the extension of school facilities.

Included in the general buildings under construction during the year were a clinic, three public toilet blocks and a fire station.

(ii) Ntuzuma Township:

Work on services and housing progressed again at a rate restricted by the limited finances available. A total of 427 houses together with the necessary services were completed and handed over for occupation during the year.

Two schools, a Teacher's Training College and an Industrial Workers Training School were also completed and handed over for use.

APPENDIX DTHE STRUCTURE AND FUNCTIONS OF THE COMMUNITY LIAISON SECTION

This is a relatively new section within the City Health Department which owes its existence to a conviction that community involvement is necessary to overcome health and social problems and improve the quality of life of the inhabitants of the City.

This section is structured for a staff of 15 Social Science graduates. Ideally, the number of Indian, Coloured and White staff should be in numbers proportionate to their population groups, but the availability of suitably qualified persons is a deciding factor. The section operates throughout the municipal area of Durban other than council letting schemes for Whites and lower sub-economic schemes for Indians which are under the care of the Housing Section of the City Treasurer's Department, and African areas which are served by social workers of the Bantu Affairs Administration Board.

Community liaison includes that part of social work known as social organisation or community organisation but does not involve case work or even group work. It extends well beyond the traditional confines of the fields of social welfare to include planning at national level, and so is concerned with the flow of authority and resources from these levels (e.g. close liaison with the Departments of Community Development, Indian and Coloured Affairs, State and Provincial Health and Hospital Services, Education departments, etc.).

Because the total well being of the individual and thus of the community is dependent upon the interrelationship of mental, physical (both personal and environmental), and social health, it is obvious that the right place for community liaison is in a health setting.

The role of the community liaison workers is in no way synonymous with that of a housing manager whose functions are, in the main, administrative, and for which no particular specialised social work training is required. The community liaison workers' approach to the community is a sociological one calling for highly specialised training. The avoidance of the imposition of other cultures and their priorities upon various communities, but rather the crystallisation of any community's wants into reality must always be the aim of this section. Although being an active catalyst it is important for the community liaison worker to maintain a low profile.

Community liaison programmes are directed towards improvement in the quality of living within communities through direct involvement of the community in its own peculiar problems and their resolution. To facilitate this, community energies must be channelled into a positive, creative and rewarding direction after identifying the social needs and problems. Where resources are inadequate to meet

a particular need, encouragement of welfare and voluntary bodies to operate to the maximum is necessary. Motivation for the creation of additional facilities where none previously existed is part and parcel of the work.

Basic to all community programmes and activities is the active participation by members of the community. The community must be assisted to recognise its problems and their causation and educated to cope with these and future problems when they arise, thereby involving them at a promotive and preventive level.

The community must be self determining; thus initiation of local interest and involvement is a very positive and important aspect for several reasons, viz.:-

- (i) it will be accompanied inevitably by articulation of problems and needs as seen by the community itself;
- (ii) a deeper and clearer insight into a community's problems, the manner in which particular communities are affected by, and react to certain problems - will enable the community to be organised or assisted to function more effectively;
- (iii) by virtue of an active participation in their own programmes the ends (being their own) provided to meet the needs will be more acceptable, effective and satisfactory;
- (iv) personal and vested interest will ensure permanence, stability, continuity and maintenance of established programmes.

Programmes are directed towards:-

- (1) elimination of wasteful overlapping of community effort;
- (2) stimulating and mobilising community resources;
- (3) engendering a fuller but proper utilisation of available facilities;
- (4) making use of all services within the health department.

In order to achieve these aims it is necessary:-

- (a) to co-operate closely with State, Welfare and Voluntary bodies;

- (b) maintain close liaison with various community groups already in existence, cultural, religious, sporting and other bodies;
- (c) maintain close liaison with the City Engineer's Department. In this connection one of the most specific and well defined functions of the social planner within a physical planning context involves the development of community services as an integral part of new housing facilities.

DURBAN FLOODS : MARCH 1976

Subjoined is a resumé of the events concerned with the Durban floods during March 1976, dealt with from the Health Department aspect only.

Arising from an early morning alert issued by the Town Clerk in his capacity as Chief of Civil Defence for Durban the department became aware on Sunday, 21st March, 1976 of an emergency caused by the flooding of the Umgeni River and its tributaries following torrential rain locally and in the peri-Durban region during the preceding three days. The flooding caused the river to overflow its banks and inundate the Springfield Flats and Sea Cow Lake.

In the absence of the City Medical Officer of Health on leave the department's civil defence plan was activated by the Deputy City Medical Officers of Health and the Acting Assistant Medical Officer of Health all of whom forthwith proceeded to the affected area and mobilised the appropriate staff and field hygiene transport. The matter of immediate concern was the dangerous plight of the Indian residents of "Tin Town" which was situated on the south bank of the Umgeni River at an altitude of 6 metres above mean sea level at the lowest point rising to approximately 9 metres.

An immediate assessment of the situation showed that the river had risen 2 metres higher than its banks to a general flood level of approximately 7,5 metres above mean sea level and whilst it was still possible for refugees from the shack settlement to be evacuated by bus, lorry, etc., persons marooned in the Sea Cow Lake area on the northern bank would require to be air-lifted by helicopter.

A second appraisal that day revealed the following circumstances:-

- (i) There were no deaths, drownings, casualties or existing medical emergency;
- (ii) a major refugee problem was already evident and hundreds of displaced Indians required to be sheltered, clothed, fed and given facilities for medical care;
- (iii) the adult members of the public immediately concerned were naturally agitated by what had transpired and the domestic pets, particularly, seemed to be completely disorientated and were rushing hither and thither in an attempt to find familiar surroundings. On the other hand children were calm (or stunned by the events) and offered no particular problem at that stage;



Aerial photograph of flooding of Springfield during March 1972

- (iv) all the displaced residents of Tin Town made their way, soaking wet, bedraggled, hungry and generally miserable, to the Indian school at the corner of Alpine and Quarry Roads where they were milling around in the hall and the classrooms;
- (v) thousands of sightseers had arrived in the area which greatly hampered the bringing of succour to those affected by the flooding;
- (vi) fires were started in the school grounds and various donations were received such as dry food from municipal stores, meat from a butcher, dried milk powder from a chemist, and fresh milk from a dairy;
- (vii) at an early stage a young Indian doctor had set up a "clinic" and was doing much to relieve pain and minor ailments. Later the Red Cross took over and also donated baby feeding bottles which were greatly in need;
- (viii) cooking was undertaken in open pots on the fires and some of the wretchedness was relieved;
- (ix) the true extent of the environmental emergency could not possibly be assessed before the flood level had considerably subsided which could take some 24 hours, but the main areas of concern were:-
 - (a) the complete inundation of the Northern Sewerage Works which were consequently out of commission with the result that raw sewage was flowing into the Umgeni River - it was obvious that the river and bathing beaches would be polluted and would need to be controlled and the water quality bacteriologically monitored;
 - (b) large drums with contents unknown but possibly potentially harmful had been swept downstream from various factories and the public would have to be warned against handling or making use of them or their contents;
 - (c) the entire contents of the compost station and part of the refuse tip had been swept into the shack settlement and night-soil pails therein spilled, thus compounding the pollution problem;
 - (d) the piped water supply had been disrupted;
 - (e) immediate shelter needed to be found for those residents of Tin Town who were affected.



Flooding of shacks in the "Tin Town" area, Springfield (March 1976).

It was significant that subcommittees of the Indian community were immediately set up by that group to assist mainly with the refugees and problems allied thereto, and sterling work was done by these committees.

The following day saw the implementation of various flood relief measures respecting the Umgeni River area, and the first evaluation of problems which had become manifest in other parts of the City arising from the flooding of the Umbilo, Umlaas and other rivers, local tributaries and various hitherto minor water courses was made.

The most important aspect was the almost complete disruption of the City's bulk water supply, due to major damage to all four aqueducts bringing water into the City. There was also a break in the Shongweni main. A local problem caused a total cut-off of supplies to the Lamont African township.

The emergency necessitated attention being given to the following:-

TIN TOWN

- (i) Of the 368 shacks, housing 762 families (some 5 000 persons), 222 shacks were flooded or had become waterlogged which rendered 450 Indian families (some 3 000 persons) homeless and they had to be moved to various private/welfare institutions as a temporary expedient;
- (ii) as an outbreak of typhoid fever amongst the refugees was possible, immunisation would be instituted as soon as an adequate supply of vaccine was obtained. All persons suffering injuries or puncture wounds would require tetanus immunisation;
- (iii) clean-up operations had to be instituted as soon as practicable after the waters had receded and appropriate measures adopted against mosquito and fly breeding and any other nuisance such as removal of compost deposits, and dead poultry and animals (numbers of live animals were rescued and removed by the relevant organisations);
- (iv) refugee camps had to be established;
- (v) supervision of medical care and co-operation with local Indian general practitioners was necessary; in fact, the index of illness remained minimal throughout due in no small measure to their efforts;



Debris on the north beach.

- (vi) regular supplies required to be arranged of medical items, baby foods, clothing and bedding;
- (vii) liaison was essential with other departments, welfare organisations and other authorities regarding accommodation, feeding, ablutions and social welfare problems;
- (viii) emergency accommodation was arranged where bedding and meals were provided, as follows:-
 - a community centre accommodated some 900 women and children;
 - a temple accommodated approximately 230 women and children;
 - a church accommodated 300 men;
 - a mosque accommodated 50 women and children.

The above made a total of 1 480 persons. In addition, victims were accommodated by relatives or friends;
- (ix) meals cooked in bulk were supplied from the community centre.

Many areas where flood water could not drain away by natural means had to be ditched and the Field Hygiene Section of the department worked in close co-operation with the Fire Department in pumping out several low-lying areas where it was impossible to dig ditches.

SEA COW LAKE

As a result of flooding of the Umgeni and Umhlangane Rivers the high water level caused extensive damage to local factories, homes and the Northern Sewerage Works and heavy pollution of the rivers; some 400 drums of tallow/chemicals from a local soap factory were washed away.

The Northern Sewerage Works, completely flooded and out of commission, caused raw sewage to be discharged directly into the river until it was possible to super-chlorinate the outfall. Because of consequent sewage pollution of sea waters all bathing beaches were closed for a week. Further, much shark-attractive material was present.

Many dwellings in this and neighbouring areas were without water for days due to damaged mains.

A large section of Sea Cow Lake subsided resulting in a manhole being damaged, but the flow along the outfall sewer was adjusted thus averting a major surcharge.

Certain badly flooded schools were closed.

On the first night of the floods a school was used for housing approximately 50 further flood refugees.



New household goods issued to families occupying tents in "Tent Town".

TENT TOWN

In the absence of immediately available permanent housing to accommodate the homeless victims, the need was met by establishing as an interim measure a "Tent Town". Accordingly Tin Town residents displaced by the flood who could not return to their shacks or be taken in by friends or relations were then accommodated in some 300 tents pitched on the Asherville Sports Grounds.

After the initial anxiety and emotional stress of a disaster such as this, a reaction in the form of anger or resentment is not uncommon and by this time some of the males were adopting a truculent attitude and there were some posters displayed demanding houses.

The tents were overcrowded and the occupants largely dazed and disorganised and the menfolk were doing very little to assist their families. Fires were started in some of the tents which created a hazardous situation, and then it rained again. Tents were "under water" and waterlogged under the groundsheet. Some occupants tore up the flooring from their Tin Town shacks, and a firm of demolishers donated timber and wooden floors were erected on stilts to be clear of the soginess.

By this time social workers and school teachers from the David Landau Centre started a creche for about 100 children in the sports ground club house.

One ray of hope was seen in the beatific smiles of the women when they waved the piece of paper which would secure for their families the allocation of a house on a priority basis, when complete at Phoenix.

OTHER AREAS

Although the Umgeni River Valley was the worst affected, flood damage caused public health problems in other areas, particularly the southern and western areas of Durban. Disruption of water supplies was a major problem in the southern areas necessitating the shut-down of many industries, close surveillance of drinking water to Non-White housing schemes and elimination of prolific mosquito-breeding in swampy areas.

Similar problems were experienced in the western areas requiring emergency distribution of drinking water by water tankers, use of river water for toilet flushing, concentrated health education measures and mass immunisation against typhoid in Lamontville township. Prolific mosquito breeding on a refuse tip demanded immediate correction.



Demolition commenced in "Tin Town" Springfield.



"Tent Town", with ablution blocks, being constructed as temporary housing for homeless flood victims.

SPECIAL MEASURES

The day after the flooding various departmental services were implemented in the main affected area and also elsewhere in the City where needed.

Monitoring and testing of water supplies, sewage, refuse, contaminated materials and bathing water were undertaken as necessary.

Mass inoculation of persons in areas affected by flooding, or where the reticulated water supply was interrupted, was administered during the day and at evening sessions. A total in excess of 52 000 inoculations was administered to Indians, Africans, Coloureds and Whites directly exposed either to a typhoid or tetanus threat during or after the floods. As a result there were no cases of typhoid or tetanus related to the floods.

The Health Education branch assisted by broadcasting over the loudhailer and in the broadcast vans warnings to the people about the health hazards through drinking and using impure waters, on hygiene and cleanliness and other information where indicated. They also assisted the immunisation teams in marshalling the public. Talks on Radio Bantu and on the English and Afrikaans transmissions were broadcast during the emergency and the press assisted with responsible, low-key, non-panic reporting.

The Family Health Section and the Community Liaison Section assisted daily wherever required particularly with regard to the temporary rehousing of the displaced persons and the various problems associated with a major upheaval of this nature.

Community Health Nurses and Health Inspectors made regular visits to Tent Town and the community centre to ensure satisfactory food and general hygiene standards. Further, adequate medical coverage was maintained.

Acknowledgment must be made to the co-operation this department received from all other departments, authorities and persons invoked.

It must be recorded that both during the actual emergency and the entire post-flood programme, extensive use was made of 2-way radio communication between staff concerned. This proved an invaluable and absolutely essential aid, and although a costly item, proved to be an indispensable investment.

By the month end the situation was well under control but much remained to be done to rehouse flood victims in permanent homes and to maintain the temporary living conditions by then improved by the building of cooking and ablution facilities.



Mass immunisation campaign against typhoid fever and tetanus as a precautionary health measure in the wake of the floods (March 1976)



Mass immunisation campaign against typhoid fever and tetanus due to floods.

Strict environmental control was exercised in this "Tent Town" and the necessary personal health coverage was maintained.

As new homes became available in Phoenix, families were resettled and the last of of the "Tent Town" dwellers were finally accommodated in Phoenix by December 1976.

In retrospect, it would seem that the flooding of the rivers serving the Durban region was due in part to heavy rainfalls occurring here and to the west towards the end of the week in question, whilst the final disaster was triggered by deluges on Saturday 20th March. This was substantiated by rainfall data, recorded at the following points and recorded in millimetres:-

<u>18 to 20 March 1976</u>	<u>Shongweni</u>	<u>Coedmore</u>	<u>Airport</u>	<u>Cedara</u>	<u>Durban Heights</u>
Thursday	31,0	64,5	81,2	40,1	61,2
Friday	16,4	65,5	68,5	29,4	47,1
Saturday	115,5	183,5	160,3	66,2	176,0
	<u>162,9</u>	<u>313,5</u>	<u>310,0</u>	<u>135,7</u>	<u>284,3</u>

